ALIGNING THE APPEAL OF ENTREPRENEURS TO INVESTORS: WHY IS THERE A NEED FOR AN OPTIMAL ENTREPRENEURSHIP TRAINING MODULE IN THE KINGDOM OF SAUDI ARABIA TO BETTER ENGAGE ENTREPRENEURS WITH INVESTORS

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ABSTRACT

Little of the available funding reaches entrepreneurs and SMEs in the Kingdom of Saudi Arabia. This lack of financing ability, known as credit rationing, is mainly due to information asymmetries and is a pressing issue in Saudi Arabia. The Saudi government is relying on the entrepreneurship and SMEs subsector to diversify the Kingdom's economy away from the dominance of oil and to create jobs for young Saudis who are underemployed.

This study aims to answer a question that hypothesizes that entrepreneurs need an optimal training module to understand the types of information that investors utilize in investment decisions and the type of "signals" from entrepreneurs that inspire confidence in investors. The human capital theory suggests that a quality training program can establish a skill base that will improve return on investment. The signaling theory suggests that the challenge of imperfect information can be largely overcome by training entrepreneurs to send more accurate and more targeted signals to investors regarding their character, skills, and the viability of their projects.

The study uses both quantitative and qualitative methods in data collection. The research was conducted within the Saudi cities of Riyadh, Jeddah, and Dammam, where most of the entrepreneurial activities and SMEs development are located. It suffered some limitations due to access to data and the conservativeness of the Saudi population in responding to academic studies that affected the sample size

The findings reveal that entrepreneurs with an in-depth understanding of investors' due diligence process are more likely to invest adequately to assemble appropriate skill sets and learn to signal the characteristics that investors appreciate while tailoring their ventures and business plans to meet investors' ideals. A training module that includes these components can be vital in overcoming credit rationing in the Kingdom. Universities, mainly business schools, may play a significant role in providing the optimal training module, with collaboration from investors.

This study contributes to the literature by representing the history of the entrepreneurship and SMEs development in the Kingdom through three main periodical stages. Also, it identifies the assessment studies that international management consultants prepared to several Saudi government agencies in the subject field. This contribution is more likely to help future researchers in having more practical information about the entrepreneurship and SMEs ecosystem in the Kingdom.

Furthermore, the study has implications on entrepreneurship and SMEs development stakeholders such as entrepreneurs, investors, training institutes, and regulators. Few recommendations are proposed. The study concludes with suggestions for research in related subject areas in Saudi Arabia and potentially other countries with similar economies.

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABBREVIATIONS

ARAMCO	Arabian American Oil Company
DD	Due Diligence
DTV	Dhahran Techno Valley
FDI	Foreign Direct Investment
GCC	The Cooperation Council of the Arab States of the Gulf
GDP	Gross Domestic Products
IFC	International Financial Corporation
IMF	International Monetary Fund
IPO	Initial Public Offering
KAEC	King Abdullah Economic City
KACST	King Abdul-Aziz City for Science and Technology
KAUST	King Abdullah University for Science and Technology
KFUPM	King Fahd University of Petroleum and Minerals
KPI	Key Performance Index
KSA	Kingdom of Saudi Arabia
MENA	Middle East and North Africa
MGI	McKinsey Global Institute
OPEC	The Organization of Petroleum Exporting Countries
TCF	The Centennial Fund
SABIC	Saudi Arabian Basic Industries Company
SAGIA	Saudi Arabian General Investment Authority
SAMA	Saudi Arabian Monetary Agency
SAR	Saudi Arabian Riyal
SBA	Small Business Association
SIDF	Saudi Industrials Development Fund
SMEA	Small and Medium Enterprises Authority
SMEs	Small and Medium-Sized Enterprises
VC	Venture Capital
UN	United Nation
UNDP	United Nations Development Programme
UNIDO	United Nations Industrial Development Organizations
US	United States
USD	United States Dollar
WTO	World Trade Organizations

DECLARATION

I certify that this thesis has not been previously submitted to meet requirements for any other higher education institution. I certify that this is my fully own effort and work. To the best of my knowledge and belief, the use of all materials from other sources has been properly and fully cited and mentioned.

Signature: _____

Date: _____

STATEMENT OF COPYRITE

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I would like to thank my great mother, Afaf Husni Ka'ki, and my lovely children for their support while I was away from family life. Likewise, I would like to thank my advisors and motivators, Professor László Pólos and Professor Mike Nicolson, who were always available not only to lead me on the right track but also for their respected valuable advice and encouragement throughout this challenging journey. I would also like to express my full appreciation to Anne Bailey, who was always available to make me feel safe by helping me whenever I needed assistance, especially in providing me the resources I needed within the university.

Also, I would like to express my full appreciation and all due respects to Durham University Business School, which gave me the honor to carry its name as one of its graduates. This great school, through its DBA program, did polish my skills and ways of looking at things, which are vital for both my personal life and my future.

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DEDICATION

I dedicate this thesis work to my caring mother, Afaf Husni Ka'ki, who sacrificed and suffered a lot for me to survive and succeed. All of my success is because of her. Thank you, Mom!

CHAPTER ONE: INTRODUCTION

1.1 Research Background

Vision 2030, the new strategic plan recently put forward by the government of Saudi Arabia, responds, among other concerns, to two key economic challenges: (1) the nation's economy has long been, and remains, dangerously reliant on a single source of income, namely oil revenue; and (2) the Saudi labor force, particularly young Saudis and women, is underutilized and underemployed. To help overcome the challenges of diversification and job creation, the government is asking the private sector to make a greater contribution to the Kingdom's economy. With regard to the subsector consisting of entrepreneurship and small to midsized enterprises (SMEs), the plan recommends an increase in contribution to the gross domestic product (GDP) from 20% (based on most recently available data) to 35% by 2030 (Vision 2030, 2016b).

The current infrastructure in Saudi Arabia to support activities within the entrepreneurship/SMEs subsector is not sufficient to undergird the type of growth that is recommended and urgently needed. Chapter 3 of this dissertation presents a survey of organizational resources operating within the Kingdom in this regard, alongside a review of literature concerning (1) the history and development of this subsector in Saudi Arabia and (2) its present state and growth needs. The review and survey together demonstrate two key areas of need—financing and entrepreneurship education.

According to Robson et al., access to financing for entrepreneurs and SMEs is **"**a major hurdle in both developed and developing economies" (2013, p. 349). Likewise, entrepreneurs need education and training to "foster conditions for new ventures and for the strategic expansion of regional SMEs" (Rasmussen & Sørheim, 2006, p. 187). In Saudi Arabia, despite the existence of many relevant institutions and programs, a wide range of authorities and observers agree that these two core elements remain major challenges in the development of the entrepreneurship and SMEs ecosystem (Abalkhail, 2009; Abousaber, 2013; Albakr, 2016**;** Alfaadhel, 2010; Al-Hajjar and Presley, 1992; Almahdi and Dickson, 2010; Alsheikh, 2011; Booz&Co., 2008; Boston Consulting Group, 2011; Global Entrepreneurship Monitoring, 2016; Kayed and Hassan, 2013; Khan, 2013; Loony, 2004; Minkus-McKenna, 2009; Porter, 2008, 2009, 2010; Sadi, 2010; Sulaimani, 2015; Tarkiz, 2012).

In economic terms, the insufficient availability of funds, even when lending institutions exist and have capital, results from a mechanism (or represents a state) known as credit

rationing. A primary driver of credit rationing is insufficient information or information asymmetries. Lenders have imperfect information about the risks represented by a given borrower and, in the case of entrepreneurs, their project. Merely imposing higher interest rates is not an effective solution, as it not only adds cost to the system, it pushes the credit market toward riskier, higher-yield projects that can, by increasing the default rate, reduce lenders' net return (Jaffee & Russel, 1976**;** Helsen & Chmelar, 2013; Stiglitz & Weiss, 1981).

By contrast, the present research is based on the premise that the adverse impact of credit rationing can be reduced by improving the quality of information. The dissertation posits that a significant improvement in identified Problem A (Saudi entrepreneurs' lack of access to financing) can potentially be achieved by addressing identified Problem B (Saudi entrepreneurs' limited or inadequate education and training). In terms of the human capital theory (Cassar, 2006; Davidsson & Honig, 2003; Schultz, 1961; Unger, 2001; Ziadat, 2015), by investing in quality education and preparation for Saudi entrepreneurs, we can establish, in this pivotal sector of the labor force, a skill base that is likely to drive performance and growth sufficiently to create and sustain jobs and allow lenders to achieve adequate return on investment to ensure the continued flow of capital into the subsector.

The dissertation further posits—and seeks to demonstrate—that entrepreneurs need training not only in the "nuts and bolts" of initiating and running an enterprise, but also in understanding the specific types of information that lenders utilize in reaching their investment decisions and the type of "signals" from entrepreneurs that inspire confidence on the part of lenders. In addition to credit rationing and human capital theory, the present study employs key concepts from signaling theory, best known from Spence's (1973) work on signaling in the context of the job market. This theory suggests, in the context of this study, that the challenge of imperfect information can be largely overcome by training entrepreneurs to send more accurate and more targeted signals to lenders regarding their character, skills, and the viability of their projects—thus leading to more effective and durable business relationships.

1.2 Research Problem

According to Ghassan Al-Sulaiman, the governor of the recently inaugurated Saudi SMEs Authority (SMEA), only 2% of available funding reaches Saudi entrepreneurs, and the agency has set the goal of increasing this number to 20% as soon as possible

(*Alriyadh Newspaper*, 2016). A link between credit rationing and inadequate information in this case is empirically likely, given that difficulty accessing vital information is a known challenge facing business development in the Kingdom. (This problem is discussed in chapter 3, in which—due to a lack of centralized data sources—the author provides a survey of credit and other institutions serving SMEs in Saudi Arabia based largely on original field research.) Indeed, to achieve successful matching between investors and entrepreneurial projects, a large amount of information is required on both sides.

According to Zwilling (2015), however, first-time entrepreneurs are often unfamiliar with the due diligence process in which investors engage, and they may be unaware of what makes a business plan attractive from an investor's perspective. Hence, they do not know how to communicate with and deliver themselves—as appealing, "fundable" packages—to investors. Moreover, as Allman (2015) notes, entrepreneurs need to know that time is always precious to investors, and they need to understand how different types of investors function. The valuation process, for example, differs markedly depending on whether the entrepreneur is dealing with a lending institution or a potential equity investor. In other words, a financier contemplating an interest-earning loan might analyze business plans and financial statements rather quickly (in what Allman refers to as "desktop" cases), whereas valuation discussions involving equity investors typically start early and run deep, since it is crucial to such investors to avoid any gap in perceived value (Allman, 2015).

If entrepreneurship education and training programs currently available in Saudi Arabia are not addressing these issues (and it is difficult to determine the extent to which they are lacking in these areas, given the aforementioned dearth of information and limitations on the author's fieldwork), this scenario would not be unique. Unachukwu (2009) presents an example in Nigeria, but he treats this state as normal for a market in which entrepreneurship education and training is a nascent field. However, there is some question as to whether knowledge of this type can be delivered through conventional training modalities. Johannisson (1992), for example, asserts that "formal training is inappropriate" to this task, and he suggests that entrepreneurship training should be integrated with "everyday business operations" to provide an experience that is close to actual cases.

If entrepreneurs are to succeed in attracting investment, they need to understand the decision-making factors on which investors rely (Harrison & Mason, 2017). From this standpoint, the present study argues—based on a review of literature, field research, and original survey data—that knowledge can be the key to overcoming credit rationing.

When entrepreneurs are armed with an in-depth understanding of the principles and procedures of the due diligence process employed by investors, they can invest effectively in their own human capital by assembling skill sets and learning to signal the characteristics that investors appreciate, while tailoring their ventures and business plans to meet investors' ideals.

1.3 Research Significance

Saudi Arabia's reliance on oil as the nation's only significant source of income has left the Kingdom vulnerable to fluctuations in oil prices, which can disrupt economic stability and potentially social stability. Such fluctuations occurred during the late 1970s, mid-1980s, and mid-1990s. Indeed, as recently as 2015, oil prices dropped by more than 50% (Al-Zahrani**,** 2015), which was particularly harmful because national expenditures had risen sharply. Faced with this challenge, the government is asking the private sector to contribute significantly to growth, diversification, and job creation. Given its present weak performance, the subsector consisting of entrepreneurial projects and SMEs is an obvious and important target for improvement.

The present research, therefore, seeks to demonstrate that investment in human capital—specifically in the area of entrepreneurs' information about investors and relevant signaling skills—is likely to contribute to a greater success rate in terms of uptake of entrepreneurial projects by investors. This larger contribution to GDP from the entrepreneurship/SMEs subsector has the potential to contribute significantly to the research basis for effective policy changes that can positively impact the economy in Saudi Arabia and in other analogous market contexts. The following specific contributions are anticipated for the research:

1. Add details and current perspectives to the literature on the entrepreneurship and SMEs development ecosystem in Saudi Arabia.
2. Contribute to the research basis for understanding the link between credit rationing and human capital in Saudi Arabia and, potentially, elsewhere.
3. Leverage the insights of entrepreneurs, investors, and subject matter experts in entrepreneurship education and training to clarify how improved information and signaling skills can increase the likelihood of funding for entrepreneurial projects.
4. Assist in developing a curriculum and delivery method for an optimal training module that is constructed based on the research's results.

5. Contribute to the understanding of the importance of collaboration between investors and designers of the entrepreneurship education and training programs to ensure that entrepreneurial training succeeds in terms of leading to more successful matches between viable projects and investor funding.

1.4 Research Objectives

This research aims to achieve five specific objectives, which are based on perspectives from literature that reflect the situation of entrepreneurship and SMEs development ecosystem in Saudi Arabia regarding access to finance and quality training. The objectives and their supporting research are as follows:

1.4.1 To justify that there is a need for an optimal training program that may help entrepreneurs gain better engagement with investors toward financing

Johannisson (1992) says that “formal training is inappropriate.” (p. 5) He suggests that entrepreneurship training should be integrated with what he calls “the everyday business operations” (p. 5) The human capital theory says that better education and experience lead to higher performance in the execution of both pre- and post-investment processes (Mason & Harrison, 2010, p. 271). Additionally, as the Saudi Arabian government’s Vision 2030 is considering the SMEs sector to help diversify the economy and create jobs, the country’s entrepreneurship education and training programs need to evolve.

Entrepreneurship education is struggling to demonstrate a suitable impact on developing countries’ economies as it is poorly inserted into their training systems (Nkirina, 2010, p. 153). Kelley and Thomas (2011, p. 90) say that many countries worldwide suffer entrepreneurship training deficiencies. These programs require a transformation in what they offer and how they are structured (Kirby, 2004). Many studies, such as Henry et al. (2005), Nkirina (2010), Fayolle (2009), Lima (2012), and Fairlie et al. (2012), support efforts to reevaluate the effectiveness of available entrepreneurship education and training programs.

1.4.2 To identify the components of the proposed optimal training module regarding the attractiveness of entrepreneurs, ventures, and business plan formulations to investors

Credit rationing emphasizes human capital and the development of entrepreneurs. Hoque et al. (2016) say that “Entrepreneur characteristics […] and education have an

impact on credit constraints." (p. 6) For instance, when we consider skills, the literature reports that investors' investment criteria are not met due to "poor quality, and they are often unable to negotiate acceptable investment terms and conditions with entrepreneurs" (Dimov & Shepherd, 2005, p. 1). As another example, the language used in determining a transaction value is "specific, complex and extensive" (Roberts, 2010, p. 1). Determining the venture's valuation is the joint responsibility of the entrepreneur and the investor (Harrison & Mason, 2017, p. 269). Thus, entrepreneurs need to know that investors are expecting them to fully understand the funding requirements at every stage of financing (Allman, 2015, p. 17).

1.4.3 To identify the significance of including the due diligence concept in the proposed optimal training module

Related to imperfect information, due diligence, which is basically a "fact-finding mission" (GE Capital, 2012, p. 3), was not found in the entrepreneurship education and training curriculums. Martin Zwilling (2015) describes the investors' due diligence to entrepreneurs as "mysterious and dreaded," yet entrepreneurs inadequately prepare their business plans for this stage toward funding. Harrison and Mason (2017) emphasize that entrepreneurs should know the decision-making factors that investors utilize.

1.4.4 To identify the need for investment and entrepreneurship education and training institutes to collaborate in keeping the educational materials and methods of delivery updated based on the SMEs investment markets' demand

Entrepreneurship education, as an academic discipline, is new (Unachukwu, 2009). Its institutes need changes in educational materials and delivery methods, but they lack qualified faculty (Fayolle, 2009). He adds that evaluation is insufficient, and "we know relatively little about the effectiveness of these types of programs" (p. 377). Hannan (2005) states that such institutes usually resist change. For the materials, Rasmussen & Sørheim (2006, p. 185) suggest considering an "action-based entrepreneurship education program."

1.4.5 To present suggestions based on the research to develop a curriculum in Saudi Arabia

Hoque et al. (2016), discussing the education of entrepreneurs on how to deal with investors, say that young SMEs are likely to suffer "less opportunity to build up a good relationship with fund suppliers" (p. 6). Feld and Mendelson (2013, p. 5) describe to

nascent entrepreneurs the complex and mysterious negotiating relationship in closing deals with investors or financiers. Khalid Sulaimani (2015) explains the importance of having a strong relationship with investors as entrepreneurs have numerous questions to ask.

1.5 Research Questions

Credit rationing presents three major constraints linked to human capital that are likely to contribute in investors' hesitation to consider financing entrepreneurs. The constraints are information asymmetry or imperfect information, entrepreneurs' character, and entrepreneurs' skills. Applied to Saudi Arabia, the Kingdom has many active entrepreneurship education and training programs, but their output is deficient when it comes to financing. This researcher argues that there is a need to address the problem by having a dedicated training module focusing on helping entrepreneurs deal with investors for a higher likelihood of obtaining funding. Based on the above, the title of this research, which contains the main research question, is:

> **"Aligning the appeal of entrepreneurs to investors: Why there is a need for an optimal entrepreneurship training program in the Kingdom of Saudi Arabia to better engage entrepreneurs with investors"**

Therefore, the main research question is: Why is there a need for an optimal training module to better engage entrepreneurs with investors who are considering financing their ventures? Derived from the main question, the sub-questions that the research examines are the following:

1. What additional knowledge do entrepreneurs need to learn to be more attractive to investors?
2. What additional knowledge do entrepreneurs need to learn to make their ventures' concepts more attractive to investors?
3. What additional knowledge do entrepreneurs need to learn to make their business plans more attractive to investors?
4. Do entrepreneurs need to better learn how investors conduct their due diligence to prevent the problem of imperfect information?
5. Is the quality of the current entrepreneurship education and training programs in Saudi Arabia acceptable for preparing entrepreneurs to connect with investors to obtain financing to establish their ventures?

6. What can investors do to help entrepreneurship education and training institutes better prepare entrepreneurs for engaging with investors on financing?

1.6 Research Limitations

This research was conducted within the boundary of the Kingdom of Saudi Arabia, mainly in the three major cities of Riyadh, Jeddah, and Dammam, where most of the entrepreneurial activities and SMEs development are located. The population sample considered in this study was restricted to the three categories of entrepreneurs, investors, and training experts.

The researcher contacted the management of entrepreneurship development communities, such as incubators, accelerators, co-working spaces, and universities, to request their assistance to encourage their entrepreneurs to answer the survey. The researcher visited most of these entities, but also, communicated with them via emails for formalities. For training subject matter experts, the researcher applied the same method of communication with universities' instructors and independent trainers who are providing entrepreneurship education and training in the Kingdom. For the investors, the researcher communicated directly with a set of investment agencies through phone calls, emails, and few visits to some of them. The communication process with the agencies and individuals took four months. The first two months (June 2015 – July 2015) were before uploading the survey on the internet. The second two months (August 1st, 2015 to September 30th, 2015) were when the survey was available for respondents. During the 60 days of the survey available on the internet, the researcher kept interacting with different communities, trainers, and investors to encourage them to respond to the survey.

Unfortunately, the number of responses was low. The survey on the internet received 558 visits. However, after reading the cover page (see Appendix 1), only 151 accepted to answer the survey, representing 27% of the total visitors. Out of the 151 respondents, the researcher rejected 45 respondents because some of them did not complete the survey at a particular stage, or their ventures were outside of Saudi Arabia. The research ends with 106 acceptable responses, where 70 respondents (66%) are entrepreneurs, 21 as trainers (20%), and 15 respondents (14%) are investors.

Concerning ethical issues related to the research, the researcher was fully obligated and committed to Durham University policies to maintain a rigorous practice in collecting data. Thus, the researcher considered the 11 major checklist points of Bradburn et al.

(2004) to assure that respondents to the study will not face any threatening language or signals in the questionnaire. Also, For the respondents on the survey, the researcher assured, at the cover page of the survey, that all information disclosed by the respondents will be acquired confidentially, privately, and with full respondent anonymity. For the interviewees, the researcher explained the process and goals of the interview beforehand and presented them the official letter from the Durham Business School (see Appendix 2) when needed.

Related limitations and challenges experienced during the study will be addressed in Chapter 5 (Research Questions and Methodology) and Chapter 9 (Conclusion and Recommendation).

1.7 Thesis Structure

The thesis consists of nine chapters. This first chapter, which is the introduction, covers the research background, addressed problem, study significance, research objectives, the research's main question and sub-questions, study boundaries, and thesis structure. The second chapter presents an overview of Saudi Arabia and covers the background of the Kingdom in terms of its geographical existence, state formation, people, and wealth. Also, it describes the economy of the Kingdom with a focus on its development process, socioeconomic challenges, and the state's new strategic plan, which is called "Vision 2030."

The third chapter spotlights Saudi Arabia's entrepreneurship and SMEs development ecosystem. It provides insight vital to rationalizing the study's theoretical foundation and discloses areas in which further research is needed. The chapter addresses, in order, the following topics:

- the evolution of Saudi entrepreneurship and SMEs as viewed through the literature
- the current innovation and entrepreneurial environment
- SMEs' current state and contribution to GDP and employment
- the organizations and programs that support financing and training for Saudi entrepreneurship and SME development
- explanation of the weak SMEs performance and growth drivers
- potential growth drivers to strengthen SMEs' performance
- summary and potential contribution to practice and literature

The fourth chapter identifies the theoretical foundation for developing the hypotheses and research framework in this study. The fifth chapter presents the conceptual

framework of the study. As a result, it leads to stating the main research question and sub-questions. This chapter also presents the research methodology and design. It identifies the sample population for the two parts of the study and the used instruments, which are a questionnaire and then a set of interviews. The piloting of the first part of the study is described with results to fine-tune the survey to the empirical run. Ethical issues and the scope and limitations are identified. This chapter ends with a short summary.

The sixth chapter contains data analysis and findings that were derived from the first instrument, the survey. The seventh chapter contains data obtained from the second instrument, the quality interview with a set of well-known experts in the SMEs investment ecosystem in Saudi Arabia. The experts were presented the results of the survey so they could elaborate on the outcomes and provide their professional and practical perspectives. The eighth chapter provides discussion of the findings and a high-level components of the proposed optimal training module. The ninth and final chapter presents a summary of the research's findings and discussion, and also presents the limitations of the study, contribution to literature and practice, and recommendations.

CHAPTER TWO: OVERVIEW OF SAUDI ARABIA

2.1 Introduction

The aim of this chapter is to provide, via a survey of relevant literature, supplemented and connected by means of the author's knowledge and experience, an overview of the mercantile and entrepreneurial conditions that pertain in Saudi Arabia, both at present and – based on information regarding changes that have been instituted or are currently in the works – in the near term. An understanding of this context is vital to the success of the dissertation, which seeks to establish a coherent, environmentally tailored framework for contributing positively to the success of entrepreneurial activity within the Kingdom. Given the unique socio-cultural circumstances in Saudi Arabia, moreover, as well as the pervasive impact that these conditions have on Saudi business and other activities, it is also necessary to consider the nation's recent history and its social and socio-economic landscape when setting out background for a study such as the present one. Therefore, this chapter begins with a section that surveys Saudi geography, state formation, societal features, and the distribution of wealth and influence within that society, before turning directly to matters associated with the economy. In the latter regard, the chapter looks first at the role of the United Nations (UN), of the Kingdom's five-year development plan approach, and at the contribution of key Saudi ministries. Thereafter, it turns to some of the major socio-economic challenges that the Kingdom faces in light of the goals of economic diversification, job creation, and joining the World Trade Organization (WTO). Finally, in the section entitled 'The Vision 2030', the chapter provides an overview of the current Saudi strategic plan, which was recently instituted with the overall goal of making the nation's economy better suited to twenty-first century best practices and competitive circumstances. The chapter then concludes with a brief summary of the information provided and of the study's potential contribution to bridging gaps in the current literature.

2.2 Background

2.2.1 Geography

Saudi Arabia is part of the region known as The Middle East – a term that refers historically to the birthplace of Judaism, Christianity, and Islam and, geographically, to the lands and waters stretching from the eastern Mediterranean to India (Aramco, 1941, p. 13). In many ways, the Arabian Peninsula (also known as Arabia), of which Saudi

Arabia covers the greater part, is the heart of the Middle East. Human habitation here has a long history, dating back some 15,000 to 20,000 years, although subject to the vagaries of climate change. In particular, as rich rivers and other water sources dried up, migrations occurred throughout the region and human presence became largely confined to oases (Metz, 1992). Over time, too, life in much of Arabia shifted from a nomadic hunting culture to agricultural communities, with active trading centers in places such as Mecca and Medina in the west of the region. Indeed, the tradition of commercial activity runs deep in the region, with many ancient desert dwellers relying on trading caravans and exchange with urban communities to sustain their livelihood and their tribal way of life. These caravans effectively linked the Peninsula to the two great civilizations of the region, those of the Nile River Valley to the west and of Mesopotamia to the east. As time went on, trade relations extended to further-flung civilizations, such as those of India and China, as well as the Mediterranean region and the African interior. As networks expanded and commerce became more sophisticated – with agricultural goods from the Arabian Peninsula traded increasingly for highly prized commodities such as spices from India and silk from China – wealth accumulated in centers like Mecca and Medina (Metz, 1992), enabling culture to flourish.

In fact, the Arabs of the Arabian Peninsula were well positioned geographically and politically to take a leading role in trade and transportation. Their reputation for expertise in this area grew, conferring a competitive advantage as potential business partners, and they maintained good relations with the surrounding powers. In this regard, the tough life and scarce of resources in Arabia made a positive contribution to political stability and independence, as the region was not considered a desirable target for occupation. However, this did not make life in Arabia entirely peaceful, as tribal conflicts often led to internal wars (Metz, 1992).

2.2.2 The Formation and Political Structure of the Saudi State

A brief account of the background to the modern Saudi state can begin in 1745, when Mohammad Bin Saud (d. 1765), the Sheikh of Diriyah (modern Riyadh, the current Saudi capital) formed an alliance with Mohammad Bin Abdul Wahhab (d. 1792), an influential Sunni preacher and Islamic Scholar who sought to purify Islam and to return followers to what the two leaders considered original or authentic Islamic practices (High Commission for the Development of ArRiyadh, 2016). This partnership between religious influence and dynastic power resulted in the first Saudi state, in which the al-Saud family ruled a large swath of central Arabia until 1818, when the regime was overthrown by the

Ottomans, who deployed Egyptian forces under Mohammad Ali for the purpose. The al-Saud house established a second state in 1824, but in 1891 the al-Rashid family, which ruled the province of Hail in north-central Arabia (see Figure 1), overthrew them. However, in 1902, 'Abd al-'Aziz ibn 'Abd al-Rahman Al Sa'ud (1876-1953), who later became King Abdulaziz Al Saud and who is known in history as Ibn Saud (Gregory Gause, 2003), returned from exile in Kuwait. In 1902, Ibn Saud's state consisted only of the central area and was known as the Sultanate of Najd. In 1922, it became the Sultanate Najd and its regions. In 1926, it became the Kingdom of Hejaz and Sultanate Najd and its regions (http://www.mofa.gov.sa/). King Abdulaziz Al Saud succeeded in unifying most of the Arabian Peninsula, including the Hejaz Kingdom, which was ruled until that time by the Hashemite family (Lebkicker, 1960). The modern Kingdom of Saudi Arabia was officially born on September 23rd, 1932 (see Table 1). Later that year, the Soviet Union became the first nation to establish diplomatic relations with the new country (Lebkicker, 1960). Other countries followed, and the Kingdom of Saudi Arabia joined the United Nations on October 24th, 1945 (United Nations, 2006).

Figure 1: Map of Saudi Arabia

Source: http://www.stats.gov.sa/sites/default/files/en-dmaps2010_0_0.pdf

Table 1: Chronology of the three Saudi States (adapted from Lebkicker, 1960)

Incarnation	**Duration**	**Culmination**
1st Saudi State	1788 – 1818	Overthrown by the Ottomans
2nd Saudi State	1824 – 1891	Overthrown by Al-Rashid of Hail Province
3rd Saudi State	1902 – present	Current ruler: King Salman bin Abdulaziz al-Saud

King Abdulaziz ruled the new kingdom – which covers almost 80% of the 2,149,690 square kilometres of the Arabian Peninsula – from 1932 to 1953, when he was succeeded by his eldest son, who ruled as King Saud for almost 11 years. In 1958, in the face of difficult fiscal challenges, King Saud delegated the running of the government to Crown Prince Faisal, his half-brother, who became the leader that established the true foundations of the Saudi nation today. Faisal became King of Saudi Arabia in 1964, assuming at the same time the title of Prime Minister (it became normal practice thereafter for Saudi kings to carry both titles). After the assassination of King Faisal by a member of the Al Saud family in 1975, another half-brother, Khalid, was announced as King and ruled until his death in 1982. Thereafter, King Fahd became the fifth monarch of Saudi Arabia, as well as the first to bear the title “Custodian of the Two Holy Mosques” – meaning those of Mecca and Medina – a title that all subsequent Saudi kings have also used. King Fahd ruled in his own person until he suffered a stroke in 1995, whereupon Crown Prince Abdulla assumed command. After the death of King Fahd in 2005, Abdullah ruled as the modern nation’s sixth king until his passing in 2015. Thereupon, his half-brother, Salman (b. 1935), succeeded as King of Saudi Arabia. Table 2 provides a complete list of the Kings and Crown Princes of Saudi Arabia in the modern era, including those designated as “Deputy Crown Prince”, a position that was created in 2012.

Table 2: Kings and Crown Princes of Saudi Arabia, 1932-2016

The King	Rank	Period	No. of Years	The Crown Prince	Relation to King
Abdulaziz	1st	1923-1953	21	Saud	Son
Saudi	2nd	1953-1964	11	Faisal	Half brother
Faisal	3rd	1964-1975	11	Khalid	Half brother
Khalid	4th	1975-1982	7	Fahd	Half brother
Fahd	5th	1982-2005	23	Abdullah	Half brother
Abdullah	6th	2005-2015	10	Sultan (Died 2011) Naïf (Died 2012) Salman Maqren (Deputy Crown Prince)	Half brother Half brother Half brother Half brother
Salman	7th	2015-		Maqren (stepped down 2015) Mohammad Bin Naif (Stepped down 2017) Mohammad Bin Salman	Half brother Nephew Son

Source: Website of the Saudi Arabian Ministry of Foreign Affairs (http://www.mofa.gov.sa/)

The government of the Kingdom of Saudi Arabia is a monarchy in which the king functions as legislator, Prime Minister, and Commander in Chief. He is supported by a cabinet-like Council of Ministers, in addition to a Consultative Council, which was added in 1993 and which has advisory powers. Islamic law governs the Kingdom and serves as its constitution. In 1992, King Fahd issued a royal decree that clarified the rights and responsibilities of the government; the principles articulated in this decree included "the system of governance, rights of citizens, and powers and duties of the government." (U.S. Department of State, 2012, p. 1) However, there are no political parties in the Kingdom – or at least none recognized as such (Central Intelligence Agency, 2016). Administratively, the Kingdom consists of thirteen main regions, or "Emirates", each of which is ruled by a member of the royal family. These regions are: (1) Riyadh, (2) Makkah, (3) Madinah, (4) Eastern Province (5) Al-Jowf, (6) Al-Baaha, (7) Asser, (8) Al-Qasim, (9) Hail, (10) Tabouk, (11) Northern Borders, (12) Jazan, and (13) Najran. Each of these administrative regions is divided into smaller governorates. Each governorate is further subdivided into smaller centers that include one or more population settlements (Ministry of Interior, 2016).

2.2.3 Saudi Society

The people of Saudi Arabia are called Saudis, in reference to the ruling family of al-Saud, which in turn takes its dynastic name from Saud ibn Muhammad ibn Mughrin (d. 1725), father of Mohammad Bin Saud. The Saudi people are considered 100% Muslim; ethnically, they are 90% Arab and 10% African and Asian origins (Central Intelligence Agency, 2016). At the time of the formation of the modern Kingdom, it is estimated that the Saudi population numbered only a few million; but in 1974, when official records began to be kept, the figure was around seven million. This figure included some two million non-resident desert people, who travel more or less continuously throughout the deserts of Northern Saudi Arabia, Jordan, and Iraq – seeking water and better climate conditions as the seasons change (Metz, 1992).

Partly reflective of this nomadic element and of the ancient lifestyle of these people, as well as of the influence of the values and goals of Mohammad Bin Abdul Wahhab, the key characteristics of Saudi society from the outset of the first state to the present day can be said to be traditionalism and tribalism (Sayigh, 1971, p. 41). Nonetheless, the modern nation has experienced considerable change, particularly since the discovery of oil in 1938. In economic terms, in less than three decades starting from 1970, Saudi Arabia transformed from “a subsistent agricultural pastoral economy to an advanced service economy” (Costa & Noble, 1986). A corresponding trend toward urbanization can also be noted, and this transformation has continued into recent times. According to data available in the early 1990s, almost one-third of the nation’s population at that time still resided in rural areas (Metz, 1992). As of 2010, however, 82% of Saudis had become urbanized (Central Intelligence Agency, 2016). Today, most of Saudi Arabia’s economic activity is concentrated in the main cities of Mecca, Medina, Taif, Jeddah, and Yanbu on the nation’s west coast, Riyadh in the Central region, and Dhahran, Dammam, Al-Khubar, and Jubail on the east coast.

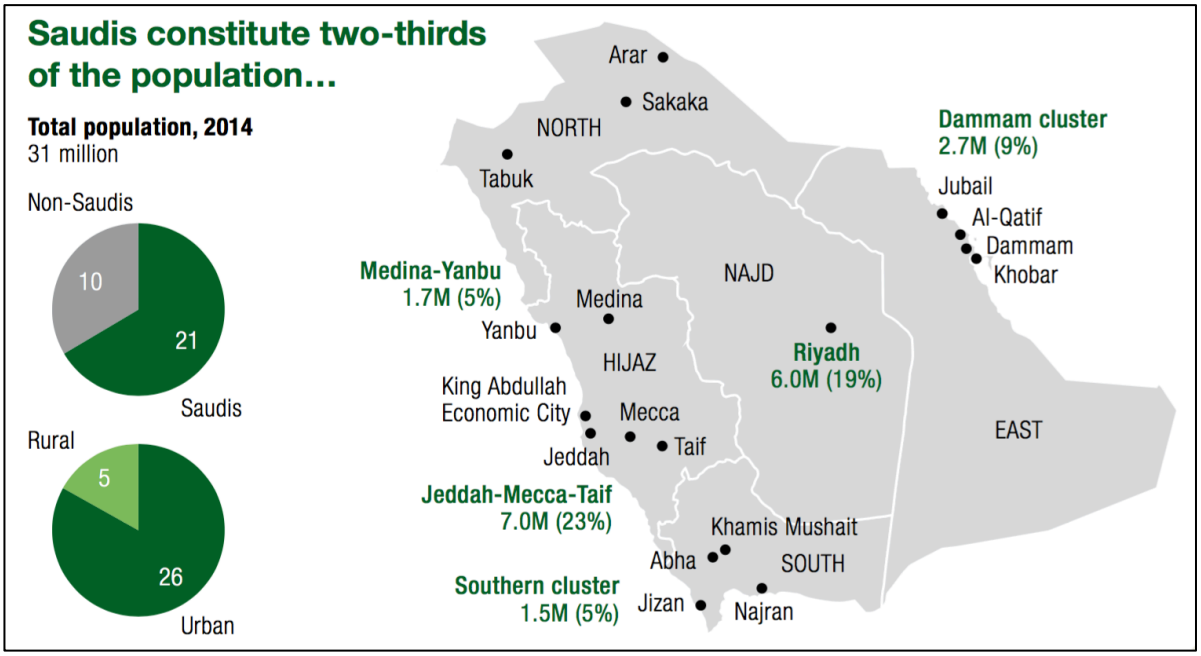
According to the most recent available data, Saudi Arabia’s total population is currently around 31 million, of which some 21 million (67%) are Saudis (General Authority for Statistics, 2016). Table 3 provides numerical data on the population of the Kingdom and its distribution by age group, gender, and nationality (Saudi and non-Saudi). Thereafter, Figure 2 shows details of the geographic distribution of the population, which is concentrated primarily in five regions, with the largest concentrations in Makkah district (23%) and Riyadh (19%) (Al-Kibsi et al., 2015, p. 28). The pie graphs on the figure provide an overview of the population distribution by nationality, as well as of the current level of urbanization across the Kingdom.

Table 3: Population in Saudi Arabia by age group, nationality (Saudi/Non-Saudi), and gender as of Mid-Year 2015

Age Groups	Saudi			Non - Saudi			Total		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
0-4	1138262	1095963	2234225	339118	305440	644558	1477380	1401403	2878783
5 - 9	833978	770425	1604403	369745	330733	700478	1203723	1101158	2304881
10 - 14	952101	888025	1840126	324517	291586	616103	1276618	1179611	2456229
15 - 19	1050941	989629	2040570	267827	231932	499759	1318768	1221561	2540329
20 - 24	1056682	1013024	2069706	268624	193244	461868	1325306	1206268	2531574
25 - 29	1035805	1022709	2058514	456411	237733	694144	1492216	1260442	2752658
30 - 34	949965	949808	1899773	850717	347977	1198694	1800682	1297785	3098467
35 - 39	826478	837028	1663506	1227407	446566	1673973	2053885	1283594	3337479
40 - 44	701227	711523	1412750	1077885	384702	1462587	1779112	1096225	2875337
45 - 49	557221	562594	1119815	795981	183113	979094	1353202	745707	2098909
50 - 54	445764	443544	889308	526767	75064	601831	972531	518608	1491139
55 - 59	338813	325764	664577	312567	51211	363778	651380	376975	1028355
60 - 64	257510	238641	496151	162708	36496	199204	420218	275137	695355
65 - 69	189490	160924	350414	59050	18424	77474	248540	179348	427888
70 - 74	124748	101902	226650	22118	12380	34498	146866	114282	261148
75 - 79	66445	53267	119712	9160	6258	15418	75605	59525	135130
80+	46013	38693	84706	10104	7528	17632	56117	46221	102338
Total	10571443	10203463	20774906	7080706	3160387	10241093	17652149	13363850	31015999

Source: The General Authority for Statistics, 2016.

Figure 2: The population distribution within the Kingdom



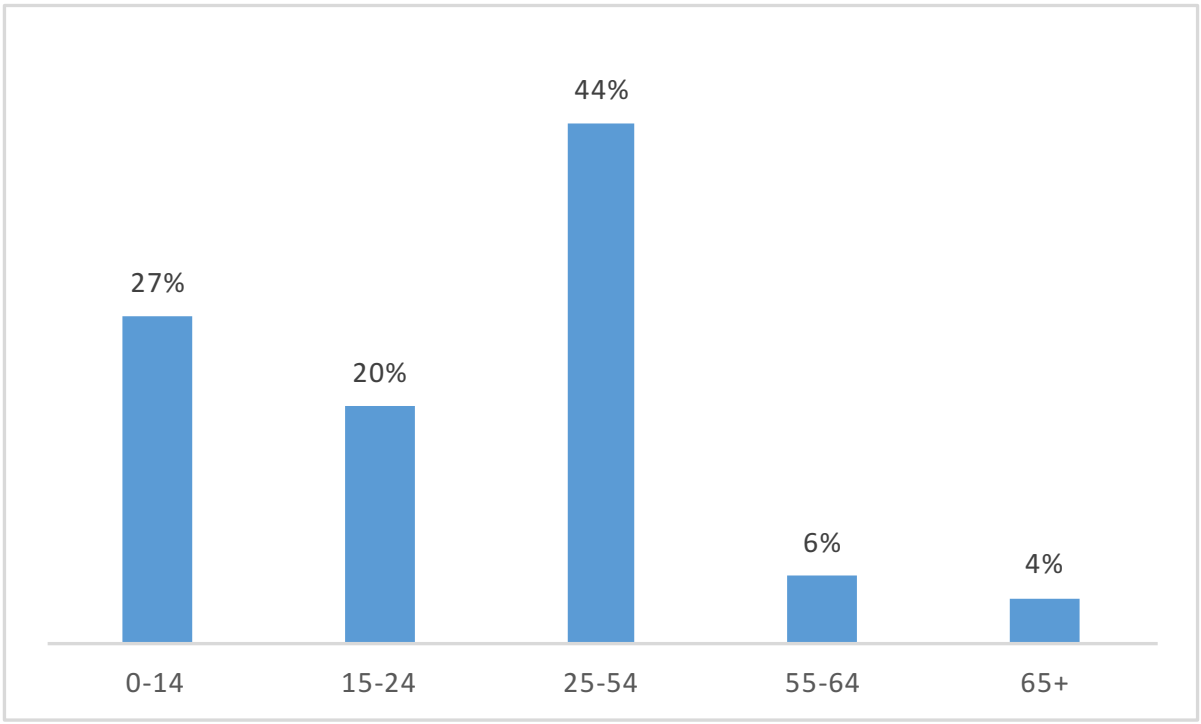
Source: McKinsey Global Institute, 2015

Figure 3 provides a closer view of the population of Saudis; whose median age is 26.8. As the bar graph demonstrates, it is a youthful population, with the largest concentrations in the age cohorts 0-14 and 25-54 years. The General Authority for Statistics (2016) puts the annual growth rate for this population at 1.46%, with a net migration rate of -0.55%.

Most recent available data put literacy among Saudis in the Kingdom at 94.7% (Communication and Information Technology Commission, 2016, p. 6). Additionally, more than 22 million individuals in Saudi Arabia are now also "digitally literate". This claim is based on statistics regarding Internet use, which grew considerably during the period 2004-2016 (see Figure 4).

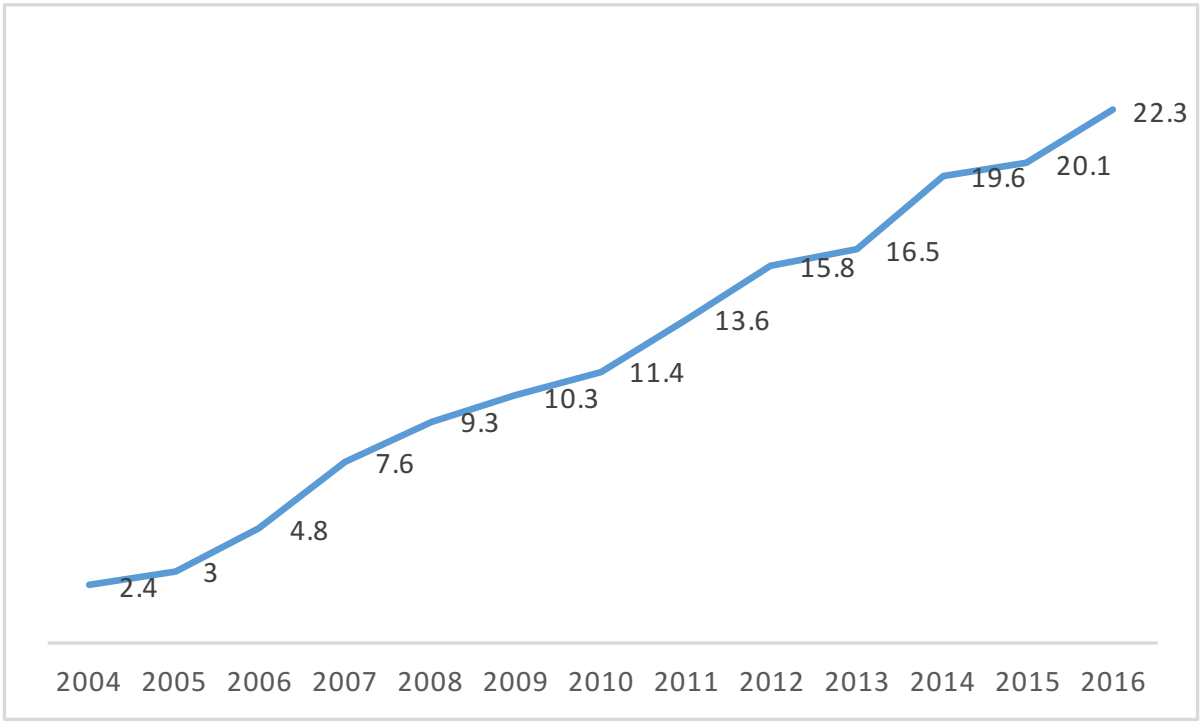
Out of the total Saudi population, more than six million individuals (nearly 30%) are currently primary or secondary students. In higher (tertiary) education, 1.3 million students currently attend 27 government universities, nine private universities, and 36 private colleges covering various disciplines. In addition, more than 200,000 Saudi students presently study abroad under government sponsorship (Ministry of Education, 2016).

Figure 3: Saudi Arabia's population by age group as percentage (Saudis Only)



Source: General Authority for Statistics, 2016.

Figure 4: Internet Use in Saudi Arabia, 2004-2015



Source: Communication and Information Technology Commission, Q1 2016

2.2.4 The Influence and Wealth

Per Meed's debatable article titled "*The Seven Global Powers*" (2015), Saudi Arabia is counted within the top ten global powers based on its impact regionally as well as globally. In Saudi Arabia, the government sees its power and influence through the following statement:

> "The Kingdom of Saudi Arabia is blessed with many rich assets. Our geographic, cultural, social, demographic and economic advantages have enabled us to take a leading position in the world." (Vision 2030, 2016b, p. 12).

Saudi Arabia's soft power, through its huge assets and position (within the Arab and Islamic world), lead it to become an important member of the global community. The Kingdom is a member of the "Group of Twenty" (G20) where twenty main important economies, in addition to other invited bodies as guests, gather to discuss global economy's key issues (Group of Twenty, 2015). Such a position "reflects the growing global stature and economic importance of the Kingdom" (Hanware, 2014). Additionally, Saudi Arabia is a member of the Organization of the Petroleum Exporting Countries (OPEC). Through this organization, petroleum policies are coordinated and unified among the members to stabilize the oil markets. This is needed "to secure an efficient,

economic and regular supply of petroleum to consumers, a steady income to producers and a fair return on capital for those investing in the petroleum industry" (OPEC, 2016).

With the existence of other natural resources, in the Kingdom, such as iron ore, gold, and copper (OPEC, 2016), Saudi Arabia leverages two main elements of wealth and influence. First, its oil and natural gas reserves, and production. Second, having the two holy cities (Makkah and Madinah) for the Muslims around the world and its role within the Muslims world. Saudi Arabia, today, is considered as an influential country due to its huge reserve of oil and gas globally and its position as the swing producer. Saudi Arabia supplies the world by almost 12% of its crude oil demand (Simmons, 2005). This wealth is administered (upstream and downstream) under a stated-owned company called 'Saudi Arabian Oil Company' or as the market knows it in the name of Saudi Aramco[1]. According to the Financial Times (2010), whilst no company reached the market capitalisation value of 1 trillion US Dollar, Saudi Aramco is expected to value several trillions, which makes it the largest worldwide. In term of market capitalisation size, it counts 40 times the size of the Royal Dutch Shell and even twice the value size of the whole London Stock Exchange, per Financial Times (2010) . With the current official numbers of proven crude oil reserves of 266.5 billion barrels, the Kingdom manages, is counted as 18% of the approved global reserves. This is in addition to a huge volume of 8,588 billion cubical meters of natural gas, as per latest reports of the Organization of Petroleum Exporting Countries (OPEC) (OPEC, 2016). It is worth mentioning that there is an additional estimated amount of a probable[2] and possible[3] oil reserves of 103 billion barrels (Simmons, 2005). Moreover, by the year 2025, it is predicted that the discovered oil reserves will jump up reaching the range of 700 billion barrels while the undiscovered may be in the range of additional 200 billion barrels (Abdul-Baqi and Saleri, 2004). Saudi Arabia is the oil swing producer globally based on its critical role as the main oil production spare capacity. It maintains its operations to assure the availability of extra million barrels per day (bpd) of crude oil to meet either a growing demand or covering any unexpected shortfalls in supplies globally. This is why OPEC members agreed in 1983 that there will be "*no production level allocated to Saudi Arabia which acted as the swing producer*" (OPEC, 2016, p. 9). Cunningham (2015) calls the Kingdom as "The Traditional Market Stabilizer" in addition to that it "holds the key" to the ability of adjusting

[1] http://www.saudiaramco.com

[2] In oil industry, Per Saudi Aramco definition, 'Probable' means more than 50% certainty.

[3] In oil industry, Per Saudi Aramco definition 'Possible' means more than 10% certainty.

oil prices globally. Saudi Arabia as being “the only true swing producer in today’s world, with a special role in ensuring market stability and continuity” (Hanware, 2014) makes it an important player in stabilizing the world economy in general.

Looking quickly at the second element of wealth and influence, Saudi Arabia has the two most important cities for the Muslims named Mecca (Makkah) and Medina (Madinah). In Mecca, Prophet Mohammad of Islam was born in 570 AD and his grave is in Medina (Metz, 1992). Thus, Saudi Arabia is the home to the holy places of all Muslims in the world who are estimated to be about 1.7 billion, which is about 23.4% of the world’s population. The number is expected to reach 2.7 billion presenting almost 30.7% of the world population by year 2050 (Johnson, Zurlo, Hickman, & Crossing, 2014). Every year, Muslims from around the world come to Saudi Arabia to perform pilgrimage (Hajj) in a specific day of the year, but can do lesser pilgrimage (Umrah) at any time of the year. According to recent report, 8 million people are coming to the two holy cities every year during the last decades. Saudi Arabia believes it is a noble responsibility to serve the two holy cities and Muslims pilgrims. Thus, more attention is being given to the holy Mosques in addition to enhancing the services and capacities in the Saudi transportation in order to better serve the visitors (Vision 2030, 2016b, pp. 16-17).

In addition to be in the heart of all Muslims due to the two holy cities, Saudi Arabia has a tremendous financial and political influence in collaboration with most of the Islamic states around the world, who need either financial help or political support. This is happening through two main organizations, the Islamic Development Bank and the Muslim World League.

The Islamic Development Bank (IDB) is considered as an international financial institution. It was established in July 1975, but actually operated in October of the same year. The purpose of the IDB is to “foster the economic development and social progress of member countries and Muslim communities individually as well as jointly in accordance with the principles of Shari'ah i.e., Islamic Law” (Islamic Development Bank, 2016). The main functions of the IDB are (1) to partake in equity capital as well as in grant loans for productive nature projects within member countries, (2) provide help in economic and social development, (3) establish and operate funds for encouraging investment in some Islamic countries with opportunities and that need such foreign, (4) setting up and operating trust funds, (5) assisting in promoting foreign trade among member countries, and (6) provides technical and training assistance. This is to happen only in Muslim countries. The bank, also, provide scholarship to citizens from Muslim non-member countries in order to help such countries in developing its human resources (Islamic

Development Bank, 2016). The bank head office is located in Jeddah in Saudi Arabia. There are 56 Muslim countries membership in the IDB where Saudi Arabia is the largest stakeholder with 23.54% ownership. Consequently, the chairman and the president of the IDB is a Saudi national (Islamic Development Bank, 2016).

The second organization, which Saudi Arabia is a major member of it, is the Muslim World League (MWL), which was founded in May 1962 in Makkah in Saudi Arabia. It is an international non-governmental organization. Its main purpose is to engage in "propagating the religion of Islam, elucidating its principles and tenets, refuting suspicious and false allegations made against the religion" (Muslims World League, 2004). The organization has a charter that states its exact goals and functions. In general, the MWL has some sort of a peaceful power to contribute in making change in Muslims societies as well as encouraging to accept the religion of Islam through showing its principles and values around the world. As the IDE, the major member of it is Saudi Arabia. As a result, the Secretary General of the organization is from Saudi Arabia (Muslims World League, 2004).

2.3 The Economy

Two issues that needs to be mentioned in this section. First, is the planning approach that Saudi Arabia follow and second, the main ministries that have significant contribution on the Saudi economy. In addition, more elaboration on the economy will be seen through the next two sections in this chapter, which are the socio-economic challenges and the strategic transformation plan "Vision 2030".

2.3.1 The Role of the United Nations Development Program

It is very important, when touching the subject of the economy of Saudi Arabia, to mention a word on a major contributor in putting the Saudi economy planning foundation based on modern and scientific principles. The economy of Saudi Arabia during the 1930's up to early 1950's was not more than a basic treasury and a basic ledger. With the wealth build-up due to the oil discovery, a real transformation in the Kingdom's government operations, mainly the economy, became mandatory. Thus, a technical cooperation with the United Nations (UN) started to take place in 1952 in order to assist the government in building its modernization development process. By 1966, when the United Nations Development Program (UNDP) organization was established (UNDP, 2016), the cooperation took further and deeper involvement, strategic wise, to help the

Kingdom in several additional themes. The actual and real development process started in 1969 when the subject cooperation with the UNDP resulted in constructing what is known as the Saudi Arabia Five-Year Development Plans focusing on setting national priorities, strategies and goals for the government, public institutions, and participating organizations. This planning approach is adopted through the Ministry of Economy and Planning in order to lead the country for practical and rigorous-based development on both social and economic scales (UNDP, 2016).

2.3.2 The Five-Year Development Plan Approach

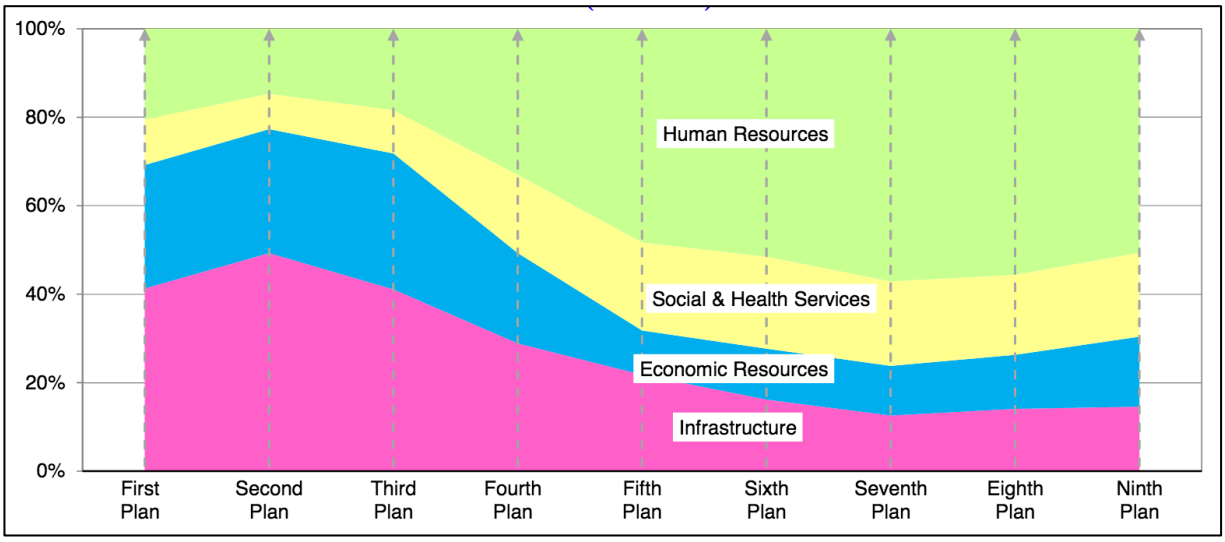
Saudi Arabia, since the discovery of oil in commercial quantities in the late 1930's, has experienced a vast transformation on the social, economic and industrial levels, as oil revenue was the real support in this regard. Although in the 1950's the Kingdom was suffering fiscal deficits due to moderate oil productions and exchange rate challenges leading to low revenues, it started to balance in the 1960's toward moving positively in 1970's. This was mainly due to increases in both oil production and prices. In 1972, oil revenues were counting for almost 64% of the country's GDP representing almost 90% of the government income (Hitti & Abed, 1974, pp. 247-248). Unfortunately, today, the income percentage remains almost the same.

According to the 'Achievements of the Development Plans: Facts and Figures – 1970 – 2011G' report of the Saudi Arabian Ministry of Economy and planning (Table 4 shows a summary), the first stage of development was including the first, second and third development plans covering the period of 1970 up to 1984. During the first two five-year development plans and with the high prices of oil occurred, the government was focusing on developing the infrastructure which ranged at that time "from very poor to inadequate" (Sayigh, 1971, p. 46), public facilities and services mainly transportations, communications, housing and municipal services in addition to electricity and water. The average spending on such infrastructure development reached rates of 41.4 to 49.3% of the total actual expenditure.

However, by the third plan (1980 - 1984) when oil prices declined sharply causing real negative effects on the Saudi economy, there was less focus on the infrastructure, consuming 41.1% of the total actual expenditure, for the favor of two main other directions (Figure 5). First, the education, health and social services were under intense consideration while the second direction was the industry that was represented in finishing the building of the twin industrial cities of Jubail on the East coast and Yanbu on the West coast. Looking to the same period from imports and exports perspectives,

during the first five-year development plan period, the imports grew 300% by the end of the duration and jumped another 227% by the end of the second plan. The same happened to export which was jumping on an average of 51% annually until it did what Tuncalp, Yavas and Cavusgil call it “a mammoth jump”. Though, things took a dive direction after that starting in 1981 (Tuncalp, Yavas, & Cavusgil, 1987, pp. 45-48).

Figure 5: The Saudi government’s expenditure (1970-2014)



Source: The Ministry of Economy and Planning, 2016

Entering the second stage of development through the fourth five-year development plan, the spending on infrastructure reduced to reach 28.9% while the focus was continuing to be on education and training. Furthermore, the focus on the private sector and building joint ventures started to take place on the theater of development toward increasing foreign investments in the Kingdom and that resulted in an increase by almost 70% of the non-oil GDP. The fifth five-year development plan (1990 – 1994) was facing a real challenge as there was an urgent need to concentrate on the military side due to political and military complications that lead to the second Persian Gulf War due to the Iraqi invasion of Kuwait. This dilemma put the government in a position to utilize its foreign reserve and even call for domestic barrowings (Mohamedi, 1993, p. 17). In fact, Ghali (1997, p. 165) mentioned that the deficit during this plan period reached almost 27% of the GDP, yet it “can face its deficit by shrinking its size and limiting its role in the economy” (1997, p. 171). Although the infrastructure was consuming 22% of the total actual expenditure, which was even less than the rate of the previous five-year development plan, the Saudi Arabian government did work on the human resources development and employment issue (Figure 5). As a result, a greater involvement of the

private sector was a real start of a new theme in this stage and in the next five-year development plan that started working on strengthening the concept of privatization and build a real market oriented economy (Al-Sarhan & Presley, 2001, p. 114). This put both the sixth (1995 – 1999) and the seventh (2000 – 2004) development plans to mainly focusing on human resources development and diversifying the national economy via growing the private sector since it is the sector that may handle positively the employment issue.

The third stage of development started by the eighth five-year development plan. It is a part of a twenty years plan ending by 2024 where the attention will be toward accelerating growth, diversification of economic base, knowledge economy and enhance the country's competitiveness through improving the investment environment that may lead to better support for a balanced economic growth giving courtesy to projects that are related to research and development, science, technology and e-government (Ministry of Finance, 2010). Right now, the ninth five-year development plan is in progress, as shown in table1, with the same mission as it is part of this twenty years' development plan. Yet, a very important statement was included in the Ministry of Economy and Planning related to SMEs development. The statement is the thirteenth objective of the Five-Year Development Pan stating "To develop the sector of Small and Medium Enterprises to increase its contribution to GDP" (Ministry of Economy and Planning, 2016).

As exhibited above, the economy of Saudi Arabia is a resource-dependant based on hydrocarbons. Oil and gas were and still the keys of the country's development, which may act, in some time, in a different way. For instance, the world economy, during the 1970's was subject to both low growth rate and prompt inflation, Saudi Arabia economy was an exception where at the same subject period of time, three five-year development plans were accomplished and implemented leading to a growth in the GDP rate up to 13.5% and a growth in the non-oil sector by more than 15% annually (Looney, 2001, p. 109). However, in other time and due to the behaviour of oil markets in terms of supply and demand, progress could not cope with expectations as the case of the desired Saudi industrial diversification during the 1980's that did not work well or as expected (Looney, 1992, p. 1367). Simply, it was due to the oil markets wide fluctuation that happened in the mid 1980's (Looney, 1988, p. 109). The interesting notice on all five-year development plans is that when the government started to focus on the privatization and private sector involvement, entrepreneurship and small to medium sized enterprises

were not mentioned by name. This could be considered a failure to see this important and critical part of the economy.

Currently, with a continuous growing population, the largest oil reserves of 267 billion barrels, the fourth global largest reserve of natural gas at a 7,300 billion cubic meter estimate and the largest gold, copper and phosphates deposits in the Middle East (Aljarboua, 2009, p. 508), Saudi Arabia's oil-based economy is still accounting for more than 40% of its total GDP. This is an output resulting from 80 to 85% of export earnings that generate 70 to 80% of government revenues (Jaffe & Elass, 2007). putting the Kingdom within the largest 20 economies globally and becomes known as "the central bank of oil" (Aljarboua, 2009, p. 501). Yet, the challenge exists since the early days of social and economic development due to the fact that the narrowness of the Saudi Arabian economy, as oil-based economy, "has serious implications for the future" (Sayigh, 1971, p. 50). It is worth mentioning that the Saudi Arabian economy could shake tremendously due to the fact that the Kingdom, currently, is consuming about 2.8 million barrel of oil daily (BPD) to meet the domestic demand for energy, which is increasing on an average of 7% annually. This may lead to make the country an importer for oil by 2038 (Lahn & Stevens, 2011, p. 2).

Table 4: The five-years development plan summary

Economic Development Stage	Five-Year Development Plan	Period	Summary of significant focus per the Ministry of Economy and Planning	Summary of significant focus per UNDP
First	1	1970 – 1974	Infrastructure, public facilities and services, and support to the private sector.	Building necessary infrastructure, technology and knowledge transfer.
	2	1975 – 1979	Development of infrastructure.	Continuation…
	3	1980 – 1984	Development of infrastructure (transportation, communications, housing and municipal services) + Electricity + Water.	Focus on diversifying the national income, improvement of productions sectors, environment protection and resources.
Second	4	1985 – 1989	Focus on petrochemical industries and investments.	Continuation…
	5	1990 – 1994	Development of production sectors, basic industries and petrochemicals. More attention to the private sectors involvement, investments and expansion.	Continuation…
	6	1995 – 1999	Development of human resources, raising labour productivity, and improvement of living standards.	Continuation…
	7	2000 – 2004	Human resources development, creation of employment opportunities, privatisation, government agencies performance, public services, technological development.	Continuation…
Third	8	2005 – 2009	First stage of a strategic path up to 2024. Focus on standard of living, human resources, diversify economy, improve productivity, enhance the private sector, balance growth in all regions of the Kingdom, and develop science and technology.	Reducing poverty, raising standards of living, improving life quality, women and youth role in national development, diversifying the economy.
	9	2010 – 2014	Knowledge Economy, “To develop the sector of Small and Medium Enterprises to increase its contribution to GDP"	Continuation…
	10	2015 - 2019	Focus on economic diversification and creat jobs	N/A

2.3.3 Main Government Bodies Contributing to the Economy

Saudi Arabia evolved in all aspects of life since its foundation back in 1932. Institutions started to appear as needed over time. Today, all government bodies work toward the political, economic, and social development in the Kingdom. Yet, several ministries are engaged directly with the state's economy itself in terms of high level strategic policy making and oversight, income, and disbursements. These bodies are (1) Council of Economic Affairs and Development, (2) Ministry of Energy, Industry and Mineral Resources, (3) Ministry of Finance, (4) Ministry of Commerce and Investment, and (5) Ministry of Economy and Planning. Through these ministries, the Saudi Arabian economy can be explored in this part of the chapter.

2.3.3.1 The Supreme Economic Council

This Council represents the stakeholders of the Kingdom regarding its economy and wealth management. It is important to know that with the existence of other related government institutions, the Kingdom's economy is fully oversighted by a higher level body called the Council of Economic Affairs and Development, which was called the Supreme Economic Council before 2016. This governance body was formed in August 1999 via a royal decree issued by King Fahd of Saudi Arabia. It is chaired by the Crown Prince. It consists eleven members. This supreme council focuses on making sure that the economic policies are working with the full consideration of "*comprehensive social welfare, the concept of a free economy, and a free market for capital, goods, services and products*" (Saudi Arabia Market Information Resource and Directory, 2015). The purpose behind that is to secure:

1. "the welfare of society,
2. provision of jobs and optimum use of manpower,
3. control of public debt within secure and reasonable limits,
4. fair distribution of national income and opportunities for investment and labor,
5. diversification of the economic base and increase in the sources of public revenues,
6. development of savings and development of saving channels and frameworks for safe investment,
7. increase of the income of the state and linking it with the movement and growth of the national economy
8. increase of investment of domestic capital and savings in the national economy

9. increase of the contribution of the private sector, expansion of its contribution to the national economy and contribution to the Government's program for privatization
10. enhancement of the ability of the national economy to cope efficiently with international economic changes." (Saudi Arabia Market Information Resource and Directory, 2015).

Today, and after the recent changes and re-structuring, the Council is chaired by the Deputy Crown Prince, who is the son of the King, Mohammad Bin Salman.

2.3.3.2 The Ministry of Energy, Industry and Natural Resources

Previously, and since its foundation in 1960, this organization was known as the Ministry of Petroleum and Mineral Resource[4]. Its purpose is to implement "*general policy related to minerals, natural gas, and oil*" (Mobbs, 2014, p. 561). This Ministry supervises companies in the oil sector. They are (1) Aramco Gulf Operation Ltd., (2) Saudi Aramco, (3) Aramco Gulf Operation and Saudi Arabian Chevron Inc., and (4) Saudi Geological Survey (Mobbs, 2014, p. 562). Today, and just before the announcement of the "Vision 2030", the Ministry was restructured to include the industry affairs, which was moved as a function from another ministry, and the word "Petroleum" was replaced by "Energy" as oil, gas and other source of energy's, such as solar and nuclear projects are under the command of this governance body.

In regards to metals and other minerals (Table 4), the Ministry owns and oversights them. However, the exclusive productions and sales are not handled by state-owned companies like the case with oil and gas, but by public companies listed in the Saudi Stock Market[5] (Tadawul). This is due to the recent movement in the direction of encouraging the private sector to invest in mineral projects, which is "*expected to remain attractive to domestic and international investors*" (Mobbs, 2014, p. 563).

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[4] Per the Ministry's website (http:// http://www.meim.gov.sa), since 1960 this ministry was headed by five ministers: (1) Abdullah Tariki, 1960-1962, (2) Shaikh Ahmed Zaki Yamani, 1962–1986, (3) Hisham Nazer, 1986–1995, (4) Ali Naimi, 1995–2016, (5) Khalid A. Al-Falih, 2016- present.

[5] http://www.tadawul.com.sa

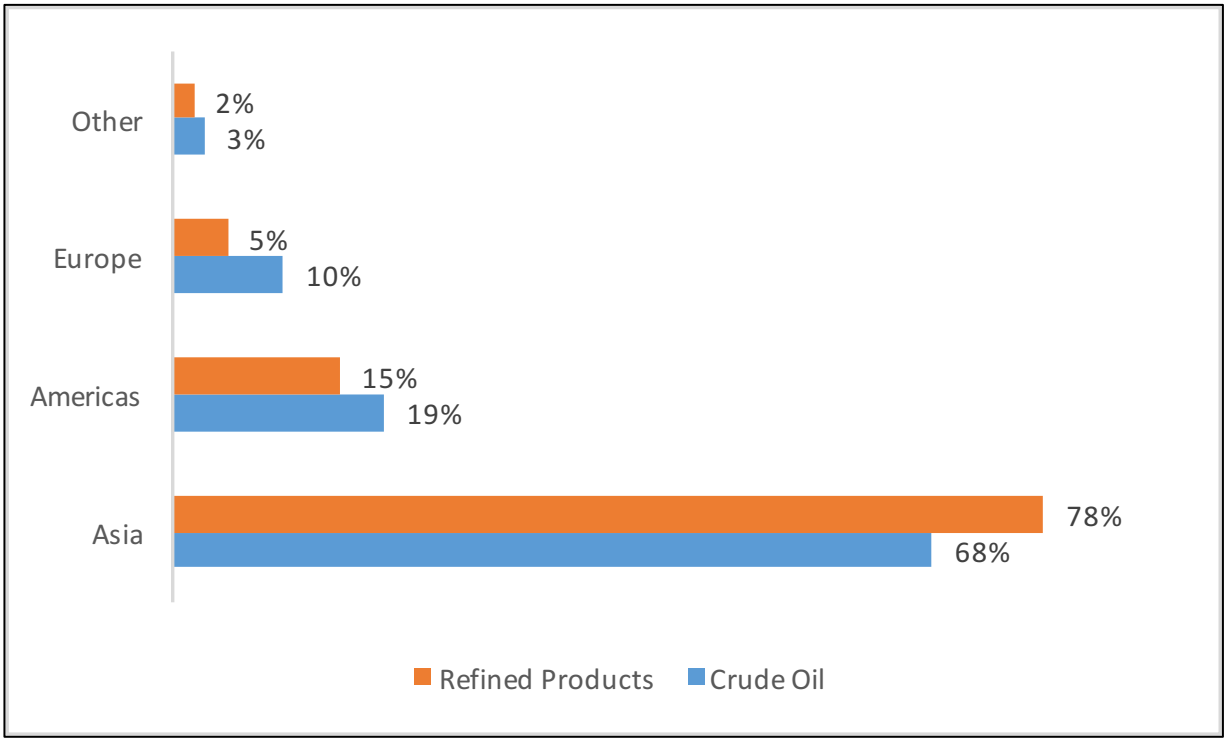
Table 5: Petroleum and Minerals list in Saudi Arabia

Mineral Sector	Type	Exclusive Production and Sales Company
Metals	Aluminum	Ma'aden Aluminium Co.
	Copper	Ma'aden Gold and Base Metals Co.
	Gold	
	Silver	
	Zinc	
Industrial Minerals	Bauxite and Alumina	Ma'aden Industrial Minerals Co.
	Kaolin and Magnesite	
	Nitrogen and Phosphate Rock	Ma'aden Phosphate Co.

Source: USGS 2012 Minerals Yearbook

This ministry is considered as one of the most famous and significant ministry in Saudi Arabia as it stands behind the Saudi economy. That's being said, almost 90% of the government revenues is through this ministry as total exports of hydrocarbons crude and refined products accounted for almost 92% of the total Kingdom's exports (Mobbs, 2014, p. 561). In this regard, it is worth mentioning that the most important market for the Saudi crude oil and refined products, per 2013 records, in Asia, Saudi Arabia sells almost 68% of its crude oil and 78% of its refined products. The Americas followed as a second largest market where total sale of crude is 19% while only 15% of the refined products. Europe comes third by 10% of crude and only 5% of refined products as shown in figure 6 (Asghedom, 2014, p. 9).

Figure 6: Saudi Arabia crude oil and refined products exports by destination, 2013



Source of data: Global Trade Information Services

2.3.3.3 The Ministry of Finance

This ministry is the most excited one in Saudi Arabia for two reasons. First, this ministry is the oldest, after the Ministry of Foreign Affairs, in the history of the Kingdom. It was established before the formation of what is known today as the 'Kingdom of Saudi Arabia'. That was in October 1927 when the country was named the Kingdom of Hijaz and Najd. The organization was named the "Directorate of Finance". In May 1932, which was four months before the announcement of the today's Kingdom official name, the name of this directorate was changed to the "Ministry of Finance".

The second reason for being an interesting ministry in the Kingdom is that many of existing ministries today were not more than directorates, or departments, within this ministry including Petroleum and Minerals, Economy, Planning, Public Work, Hajj and Umrah, Agriculture, Communications, Water and Electricity, and Transportation (Ministry of Finance, 2016).

The objectives of the Ministry of Finance are critical as it oversights and control the income and the disbursement of the government. Based on the listed objectives on the Ministry website, its duties are:

1. “Supervising implementation of the government’s fiscal policy and monitoring its implementation by the relevant agencies.
2. Preparing the government’s budget, discussing it with government agencies, and monitoring its implementation.
3. Controlling the current accounts between the Ministry of Finance and all other government agencies.
4. Monitoring the pre-disbursement phase of budgetary funds for all government agencies.
5. Supervising government revenue collection activities and ensuring that they comply with the relevant rules and regulations.
6. Supervising the annual closing of the government’s accounts and expenditures.
7. Supervising and protecting government’s properties.
8. Representing the government in international and regional economic and financial institutions, monitoring international financial and economic developments, and preparing the necessary studies and reports.
9. Implementing the government’s resolutions with respect to external assistance.
10. Monitoring implementation of the government’s policy for providing loans to individuals and national corporations for various developmental activities through its banks and funds, including the Agricultural Bank, the Credit Bank, the Industrial Development Fund, the Real Estate Development Fund, and the Public Investment Fund” (Ministry of Finance, 2016).

As seen from its objectives and even the organizational structure tells a lot about its functions, the operation of the Ministry of Finance is huge and heavy as it involves in many aspects within the Kingdom as well with international agencies. While Saudi Aramco is in charge for exploring for oil and gas, producing them then sell them, the income goes to the Ministry of Finance. Internally, this huge organization oversights and manages the State’s revenues, budgeting with all related activities such as auditing, costing, contracting and contracts progressing follow-up, lending, and borrowing. Internationally, the Ministry of Finance represents the Kingdom within global agencies such as the IMF, World Bank due to the Kingdom’s commitments as members in such organizations. This is in addition to represent the country’s, in financials aspects, with the Gulf Cooperation Council (GCC), Islamic and Arab States (Ministry of Finance, 2016).

2.3.3.4 The Ministry of Commerce and Investment

This ministry is one of the most dynamic government bodies in relation to its economy. It carries many responsibilities in this regard. Its significance within the Saudi economy can be seen through some of its major tasks and responsibilities such as:

1. Setting commercial policies
2. Suggesting issuing regulations
3. Review and supervise endorsed commercial regulations and policies
4. Manage companies and commercial register affairs
5. Supervises commercial chambers, franchises, trademarks,
6. Monitor to prevent any commercial fraud and monopolization
7. Work on developing trade relations with other countries
8. Supervising the admission of the Kingdom to the WTO
9. Work on boosting up the non-oil exports and improve the environment for this mission (Ministry of Commerce and Investment, 2016).

The old name of this government body was the Ministry of Commerce and Industry (MCI). After the re-structuring based on the Kingdom's "Vision 2030" strategic transformational plan, it became the Ministry of Commerce and Investment as the Industrial affairs sector was moved from it to join the Ministry of Energy, Industry and Natural Resources. However, two important mechanisms came under this ministry to foster the economy mainly the private sector.

First, the Saudi Arabian General Investment Authority[6] (SAGIA), which was an independent organization, became under the umbrella of this ministry. SAGIA was established back in the year 2000. Its vision is to "Empowering differentiated investments for sustainable economy" (SAGIA, 2016). Thus, its mission is to develop and attract foreign investments by "improving the investment environment, and raising the level of services by qualified staff and effective partnerships" (SAGIA, 2016). Its mandate is to act as "a central agency for inward investment in Saudi Arabia and to help attract investments to serve the development goals and participate in the diversification of the Saudi economy" (SAGIA, 2016). It helps investors by introducing them the key stakeholders in the Kingdom as well to capital access, industrial lands and commercial facilities and support. Furthermore, SAGIA provides to potential foreign investors the advisory services needed about the Saudi economy. This is why SAGIA, in addition to

[6] http://www.sagia.gov.sa

its head offices in Riyadh the Capital, it has several satellite offices all around Saudi Arabia for this purpose (SAGIA, 2016).

The second body is the Public Authority for Small and Medium Enterprises, which was approved by the Royal Cabinet to be formed on the 26th of October, 2015. In August, 2016, the Minister of Commerce and Investment "issued a decision to commission Dr. Ghassan Ahmed Al Suleiman, a deputy of the General Authority for small and medium enterprises" (Ministry of Commerce and Investment, 2016). This new organization "will enjoy independent administrative and financial powers" with a board headed by the Minister of Commerce (Saudi Gazette, 2016b). Per some government officials, the three main purposes of this organization is, first, to "help create jobs for young Saudis and boost the economy" (Arab News, 2015). This will be through helping in creating SMEs through funding them. Second, this authority will help in removing "several obstacles facing SMEs, which is crucial for the country's economic growth" (Arab News, 2015). Third, it will make sure these new formed SMEs are "more competitive and innovative, and attract investment" (Arab News, 2015).

2.3.3.5 The Ministry of Economy and Planning

In 2003, the role of handling the economic subject was moved from the Ministry of Finance and National Economy and added it to the Ministry of Planning to become the Ministry of Economy and Planning.

This Ministry, consists five main deputy ministries. They are (1) Planning Affairs, (2) Economic Affairs, (3) Sectoral Development Affairs, (4) Human Development & Community Affairs, and (5) Shared Support Services. Through these deputy ministries, it acts as the central point between the reset of ministries in the Kingdom in order to "streamlining collective efforts towards unified socioeconomic goals" (Ministry of Economy and Planning, 2016). This is to align all government entities to work toward achieving the policy makers' priorities which "ensure the country's sustained socioeconomic development" (Ministry of Economy and Planning, 2016). Consequently, the main roles of this ministry are:

1. "Strategically advance the Kingdom's vision for long term development, based on insights on domestic and international economic trends
2. Facilitate private sector engagement in achieving the Kingdom's socioeconomic development goals, in close collaboration with other ministries, relevant entities, and businesses

3. Actively support other ministries and government agencies to achieve their strategic objectives, by offering to collaborate, technically advise, provide research, etc.
4. Contribute to drafting economic policies and implementing programs that will serve achieving national priorities and objectives
5. Comprehensively prepare the quinquennial national development plans, as well as evaluate their implementation in order to measure their effectiveness and impact
6. In close coordination with the Ministry of Finance, estimate the necessary budget allocations required to implement plan directives and national priorities
7. Conduct vital economic studies and publish periodic reports, in addition to providing recommendations to relevant entities based on research outcomes" (Ministry of Economy and Planning, 2016).

The most significant output of this ministry is what the Kingdom relies on for development. It is called the five-year development plan. This plan talks how the Kingdom will move every five years toward its strategic goals economically and socially.

2.4 The Socio-Economic Challenges

Saudi Arabia, currently, finds itself in an uncomfortable zone due to several challenges such as geopolitical conflicts with Iran, Yemen, Iraq and Syria, as well as standing on the edge of "a generational change in leadership" (Salameh, 2016). However, aside from these challenges, Saudi Arabia is facing a set of socio-economic challenges, but the most critical ones are related to diversify its economy as well as create jobs to young Saudi citizens (Al-Kibsi et al., 2015). These challenges are (1) the single commodity-based economy transformation, with a related second challenge, (2) the membership in the World Trading Organization (WTO), and (3) the population and unemployment.

2.4.1 Single Commodity-Based Economy

The first critical socio-economic challenge, which the Saudi Deputy Crown Prince considers it as the key challenge that the Kingdom faces, is the "overdependence on oil and the way we prepare and spend our budgets" (Friedman, 2015). Two real examples may show the case. First, the total export of Saudi Arabia, in 2012, included 87% of crude oil and refined products. In addition to another 5% of petrochemicals, this makes

hydrocarbon exports reach 92% (Mobbs, 2014). A second example is that since September 2014, for instance, the oil prices has lost already about 67% of its value (Salameh, 2016). Today, “the IMF believes that Saudi needs USD100 oil to balance the budget” (Clarks, 2016) while oil prices are in the range of 50’s. It is expected to trend up to about USD 85 by 2018 (Reeve, Gilmour, & Simmons, 2015, p. 1).

Saudi Arabia enjoys one of the largest gross domestic products index (GDP) in the Middle East and North Africa (MENA). However, according to Saudi Aramco’s internal documentations[7] looking at future economic scenarios based on the predictions of the oil market, the reports says that the Saudi GDP needs to grow by 3.1% per year as to maintain a satisfactory standard of living. With the dependence on oil and gas sales within uncertain energy markets leading to “a far more hostile environment” (Grant, 2003, p. 506), Saudi Aramco forecasts, that time, that there will be a serious gap in revenue. The same report mentioned that the private sector needs to grow at 6.8% per year to bridge this gap. This can only happen through a large increase in private sector investments and new business creation. Here, the expectations of the economic studies department in SAMBA, which is one of the important banks in the Kingdom, say that the government is planning to move forward in spending, which will be covered by savings due to deficit in income, to set the annual growth by an average of 4.4% and the non-oil GDP is set to reach a growth of 3.6% (Reeve et al., 2015, p. 1).

The intention of the Saudi Arabian government is to reform its oil and gas based economy by eliminating hydrocarbon being ‘the economy’, but becoming only a component of it as “the budget is exposed to swings in oil revenues, which leads to pro-cyclical fiscal policies” (Porter, 2009). Oil and Gas contribution to the GDP is 46%, as per figures of 2015 (Table 6), while other sectors’ contribution, in total, covers the rest of the 54% (Trading Economics, 2016).

To see how serious the problem is, relying on oil and gas makes the Saudi Arabian economy to fluctuate based on their prices in the international markets. Figure 7 shows such significant reflection on the growth rate which at a certain time reached 27.49% yet it went down to negative 11.1% in fiscal year. Currently, the growth rate is at 1.5% (Trading Economics, 2016). Such situation is not healthy for the government of Saudi Arabia in terms of spending versus revenues. This may mean that as the budget of the government is to “swings in oil revenues”, this will lead to “pro-cyclical fiscal policies” (Auty, 2001, p. 79). As shown in figure 8, the gap appears clearly, as an example, in the

[7] A presentation by the subject information was presented to the Company’s top management in 2004.

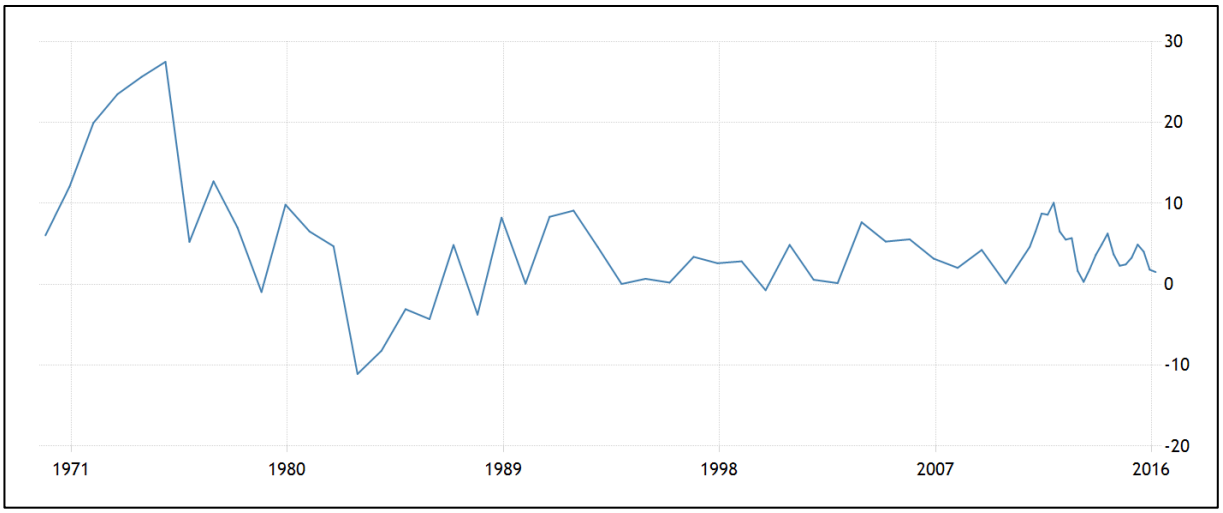
last ten years. Same applies to previous years too. The revenue dependence on oil has exposed the economy to mood swings. Per Grant (2003), this has "increased the volatility of the business environment making strategic planning more difficult" (p. 491) and adding to the "uncertainty and turbulence [which] has created a far more hostile environment" (p. 506).

Table 6: Sectors' contribution to GDP in Saudi Arabia, 2015

Sector	**Rank**	**Contribution to GDP**
Oil & Gas	1	46%
Services	2	36%
Manufacturing	3	10%
Construction & electricity, gas & water distribution	4	6%
Agriculture, forestry & fishing	5	2%
Total		**100%**

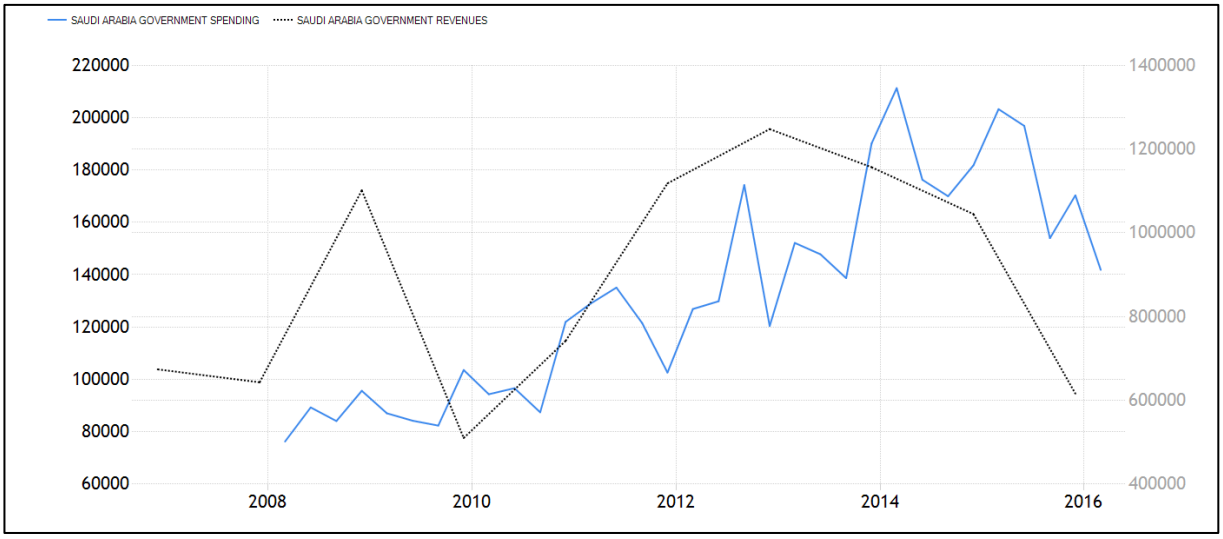
Source: Trading Economics, 2016

Figure 7: Saudi Arabia's annual growth rate (1969 - 2016)



Source: Trading Economics, 2016

Figure 8: Saudi Arabia government's spending vs revenues (2006-2016)

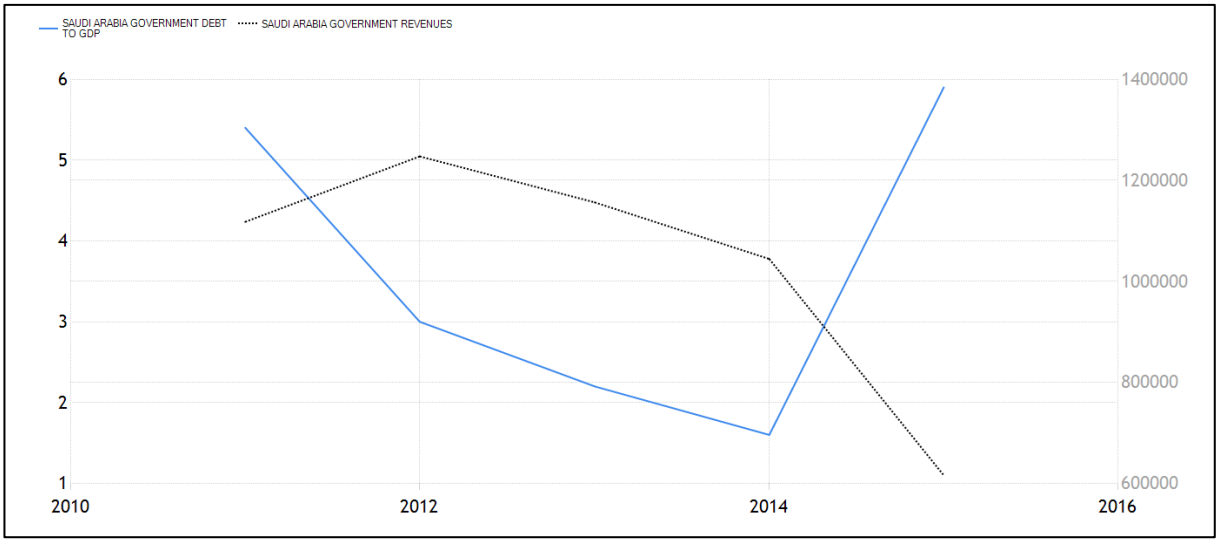


Source: Trading Economics, 2016

In a recent report by McKinsey & Co.[8], it states, "Saudi Arabia can't afford to wait for oil prices to recover and needs to accelerate economic measures to avoid rising unemployment, deficits and debt" (Martin, 2015). When it comes to debt as a percentage to the GDP, investors as well as lenders focus on this ration and trace the historical records in order to assess whether the government is capable to make all scheduled future payments on its debt. Consequently, this affects the Kingdom's borrowing costs as well as the government bond yields. Talking numbers, for instance, in 2015, the debt to GDP was 5.9% jumping high from 1.6% in 2014. Due to depending on oil, Saudi Arabia faced debt situations varies between a minimum of 1.6% up to a maximum of 103.5% debt ratios to the Kingdom's GDP (Trading Economics, 2016). Additionally, Jasimuddin (2001) addresses the country's position clearly when he says "Saudi Arabia is yet to succeed in global competition, but the relative decline in its competitiveness demands a reexamination of its national competitive advantages" (Jasimuddin, 2001, p. 59). Per the latest reporting of the World Economic Forum, the global competitive index shows Saudi Arabia in the 24th rank in 2014-15 declining from the 20th position in 2013 which was a decline from its position in 2011 as it was ranked 17th that year (Schwab, 2014, p. 325). The Saudi economy is not progressing competitively. This demonstrates that Saudi Arabia needs a transformation to its economy.

[8] http://www.mckinsey.com/

Figure 9: Saudi Arabia government's debt vs. revenues (2010-2015)



Source: Trading Economics, 2016

2.4.2 The World Trade Organization (WTO) Membership Requirements

Saudi Arabia started challenging negotiations to join the World Trade Organization (WTO) in 1994 (Alyoum Newspaper, 2005). The accession principles covered major issues such as good and tariff, services and disputes of other members. This covered 20 key subjects as shown in table 7.

In October 2005, WTO working party concluded the long-years negotiations for Saudi Arabia accession to the organization. In December of the same year, Saudi Arabia, which is counted as "the world's 13th largest merchandise exporter and the 23rd largest importer" became the 149th member of the WTO officially (World Trade Organization, 2016).

Table 7: Subjects covered during negotiations with WTO (1994 - 2005)

	Subjects
1	Agriculture
2	Antidumping
3	Balance of payments
4	Customs valuation
5	Government procurement
6	Import licensing
7	Information technology products
8	Intellectual Property Rights
9	Regional trade Agreements
10	Rules of origin
11	Safeguards
12	Sanitary and phytosanitary measures
13	Services
14	State trading enterprises
15	Subsidies and countervailing measures
16	Technical barriers
17	Textiles
18	Trade and development
19	Trade-related investment measures
20	Trips

Source of information: World Trade Organizations (WTO)

WTO membership is so significant to the Kingdom as the organization “deals with the global rules of trade between nations. Its main function is to ensure that trade flows as smoothly, predictably and freely as possible” (World Trade Organization, 2016). This will help Saudi Arabia in accessing the international markets. Although it should leverage its share of world trade, the Kingdom has yet to respond to the obligations of fully liberalizing its economy and adapting its social, legal and economic institutions, which some Saudi economic experts state that it can be accomplished (Alyoum Newspaper, 2005). Remaining barriers to market accession have increased the risk of foreign direct investment (FDI) caused by the “challenges of structural reform, weak market structure, poorly specified property rights and institution uncertainty” (George & Prabhu, 2000, p. 626). External pressures to stabilize economic and legal barriers have put “constraints on the external information gathered’ impacted on legitimacy considerations’ and aggravated the “problem of collective rationality and general equilibrium” (Haveman, 1992, p. 48). These institutional voids have hampered the globalization strategies of

Saudi Arabia, limiting the emergence of a private sector contribute to the sustainability of the economy.

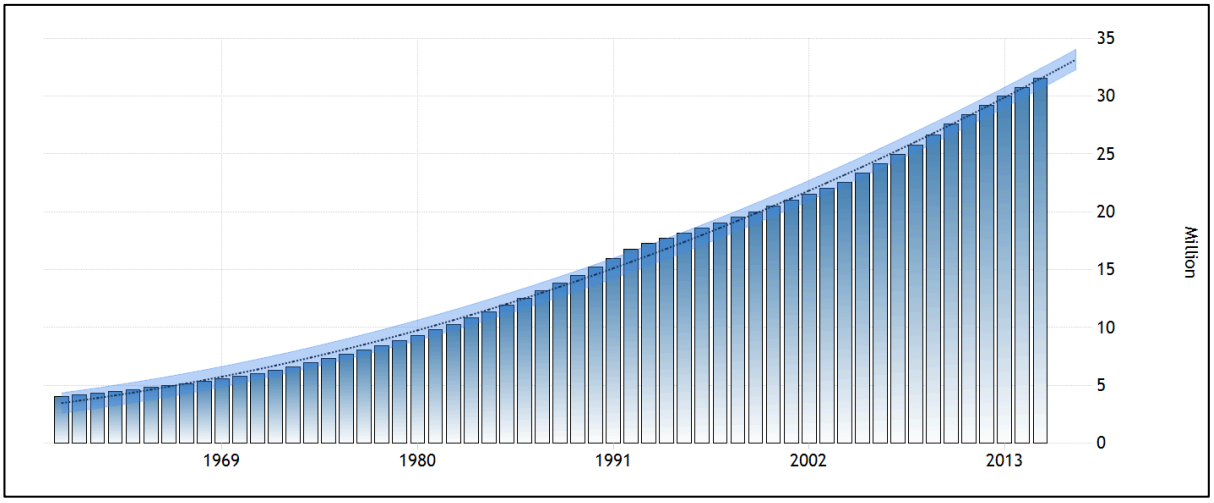
To respond to these socio-economic challenges, which means shifting environmental conditions, The Saudi Arabian governmental priority lies on rehabilitating its economy to become “capable of producing and disseminating knowledge, and using that knowledge to become the main factor of growth, wealth creation and employment” (Ministry of Economy and Planning, 2014). The 9th five-year development plan (2010-2014), which is a part of a strategic 20 years plan up to 2024, aims to “develop the systems and improve the investment environment to develop the private sector [...] as to achieve the strategic objectives of the Kingdom of balanced diversification, economic growth, increased productivity and improved competitiveness” (Ministry of Economy and Planning, 2014). George and Prabhu (2000) say that by “targeting and designating national priority areas, emerging economies are better able to focus their limited resources in [the] development of industries in which they are likely to maximize economic and competitive benefits” (p. 625).

With the command of the Supreme Economic Council, which is headed by the Deputy Crown Prince, the plan was evolved at the end of 2015 to become more robust and more aggressive. This was the direction after a full assessment, which resulted in an evolved strategic plan titles “Vision 2030”.

2.4.3 Change in Population and Unemployment

At a societal level, Ottaway (2012) alerts to the change of population in Saudi Arabia as “a tight race against time to head off a social explosion”. Per the Trading Economics (2016), statistical information (Figure 10) shows continuous active increase in the Saudi population. Within a period of only fifty years’ (1960 – 2015), the population increased from 4 million to 31 million. It is expected to reach almost 35 million by 2020. Even further as it is expected that may reach 50 million by 2030, which may increase the pressure on the management of unemployment and the development of new industries (Simmons, 2005, p. 1).

Figure 10: The population of Saudi Arabia (1960 - 2015)



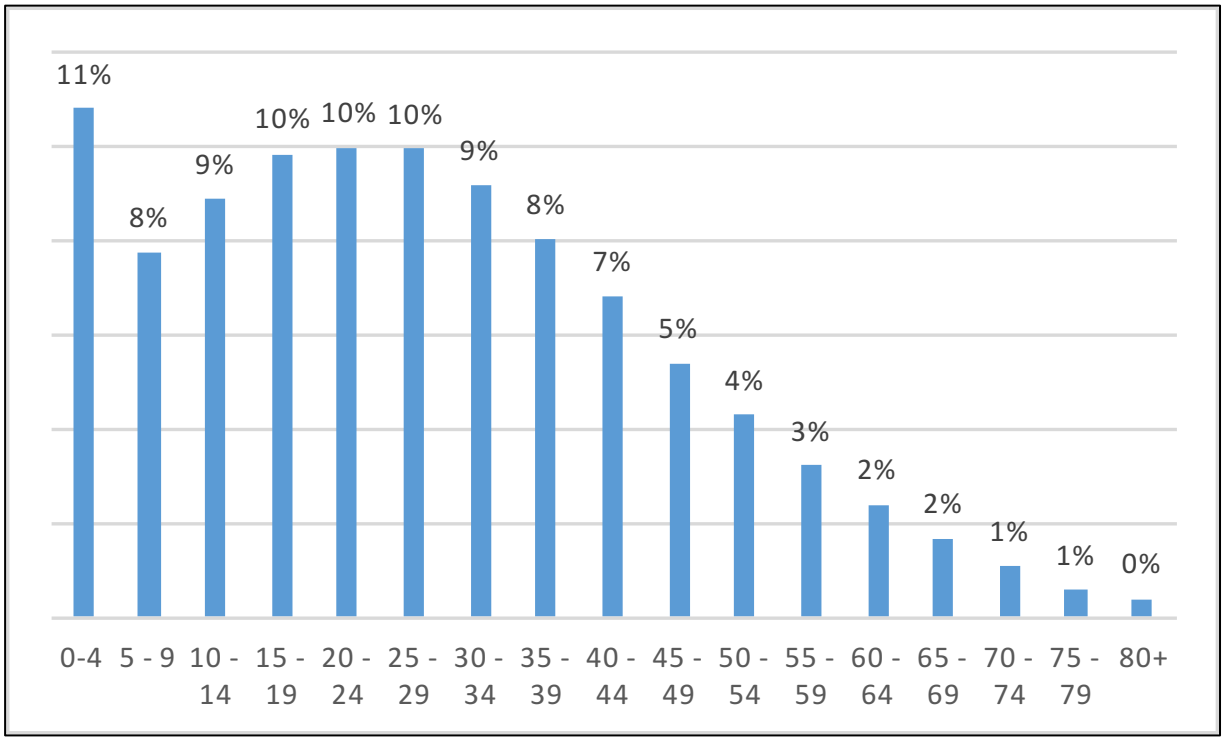
Source: Trading Economics, 2016

Looking at figure 11, the graph shows the high percentage in the young population. According to the recent numbers, Saudis of both genders who are under the age of 25 are counting 48% of the total population. Recently, the Deputy Crown Prince Mohammad Bin Salman said it loud and clear that the population growth in Saudi Arabia is “reaching very scary figures” (The Economist, 2016). If the young population suffers from unemployment, this “has the potential of becoming a fully-fledged economic crisis, perhaps severe enough to destabilize the regime and bring a new era of uncertainty to the kingdom” (Simmons, 2004, p. 2). Additionally, a such demographic trends may present another challenge with is “supporting a larger number of retired workers and older people” by 2030 as shown in figure 12 (Al-Kibsi et al., 2015, p. 36).

Without a healthy economy mainly in the private sector, its absorptive labor capacity is restricted to a minority of new labor entrants, which can only be improved by diversifying the economy away from oil (Looney, 2004a, p. 2). The unemployment number is not the same based on different respected resources. Although the unemployment rate in Saudi Arabia is 5.7% as of last 2015 (Ministry of Economy and Planning, 2014). It is worth mentioning that the unemployment rate in the Kingdom is reported as 10.5% by a third well known and respected information providing agency in the United States (Central Intelligence Agency, 2016). It is important to bear in mind that according to Adecco, which is a global leader in providing recruitment and human resources services pointed to that “an official unemployment rate is often skewed to look more positive than it actually is” (2016). Regardless of the differences in the numbers reported by different agencies, the issue of change in population and unemployment rate

in Saudi Arabia is a serious one especially with such very young population. According to a recent report, Saudi Arabia needs to “create as many as six million jobs by 2030, enough to employ the sizable cohort of young Saudi men and women entering the labor force over the next 15 years” (Al-Kibsi et al., 2015).

Figure 11: The population of Saudis in the Kingdom by age as of 2015

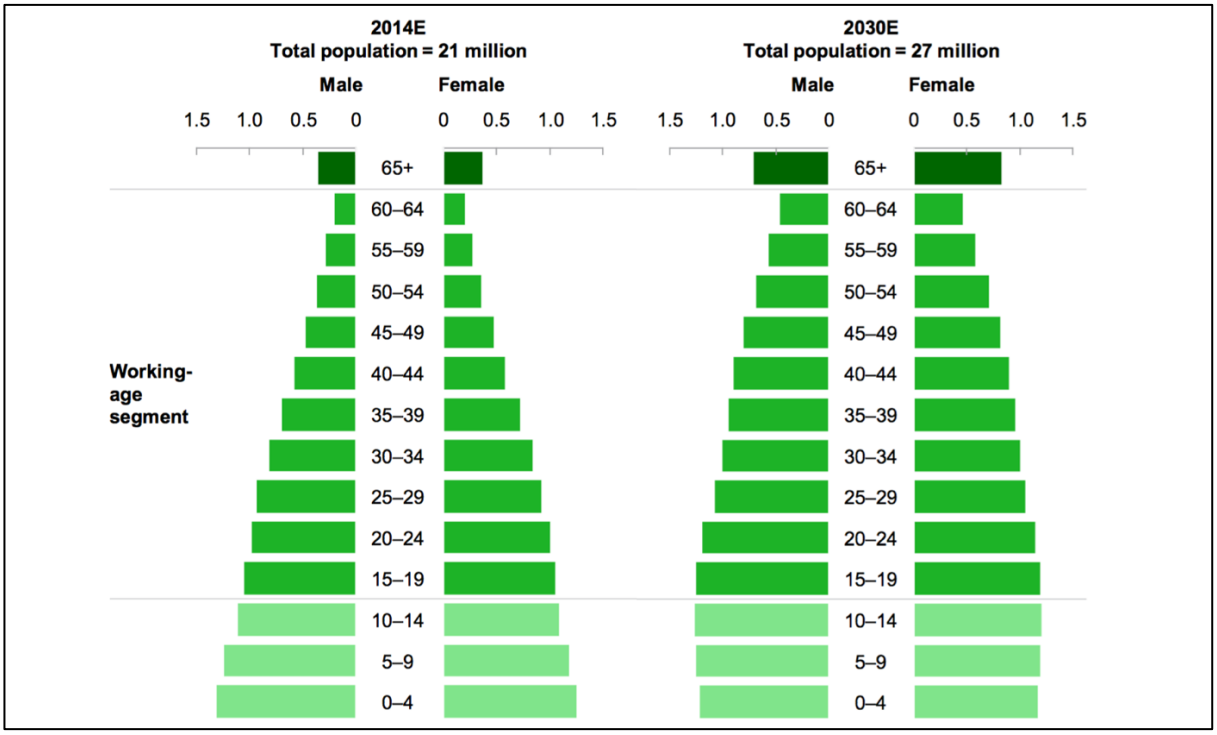


Source: The General Authority for Statistics, 2016.

Note: Graph by the researcher.

The reflection of creating jobs with the reduction on relying on expatriates will help the Kingdom’s in another important subject, which is sustaining wealth creation within the country. According to a recent report, Saudi Arabia Saudi is counted as “the second largest remittance country in the world after the United States, with $36 billion sent home by foreign workers in 2014” (Al-Kibsi et al., 2015, p. 41). This is counted as a huge number of remittance when compared with its economy size.

Figure 12: Growing forecast of working-age and older Saudis



Source: McKinsey Report, 2015

2.5 The Vision 2030

In brief, Saudi Arabia is looking to transform itself by ending its dependence on oil revenues and work on building an economy that works for the future as “the current path can’t be sustained much longer” (Salameh, 2016). Based on a recent high impact report of McKinsey Global Institute (MGI), to the Government of Saudi Arabia in this regard, “the fiscal position of the national government will deteriorate sharply”. The high prices during 2003-2013 that raised the wealth of the Kingdom, which made it to become the 19th largest economy in the world, helped the government to invest in education, health, and in the infrastructure. Even it built a reserve that equaled to the Kingdom’s 2014 GDP. However, Saudi Arabia “can no longer grow based on oil revenue and public spending”. Even if it responded by changing in its policies such as freezing its budget or limiting the number of foreign labor. This is due to the recent facts of the dramatic change in the global energy market as well as the expected demographic evolution in the number of Saudis working-age by 2030 (Al-Kibsi et al., 2015).

MGI sees that now is the time for Saudi Arabia to start what is called “a productivity- and investment-led” transformation that can assist in building a “future growth, employment, and prosperity for all Saudis” (Al-Kibsi et al., 2015, p. 8). Such a

transformational plan can permit Saudi Arabia to again two significant gains. First, to double the GDP. Second, to create about six million new jobs for Saudi citizens by 2030. However, this requires a huge investment of around USD 4 trillion in eight sectors. These sectors are (1) mining and metals, (2) petrochemicals, (3) manufacturing, (4) retail and wholesale trade, (5) tourism and hospitality, (6) health care, (7) finance, and (8) construction. These sectors, per the said assessment report, would “have the potential to generate more than 60% of this growth opportunity”.

However, MGI proposes that to enable the transformation, Saudi Arabia needs to “accelerate the shift from its current government-led economic model to a more market-based approach” (Al-Kibsi et al., 2015). This means, first, a change must occur in the labor market to have more skilled foreign workers, less non skilled workforce, and providing more jobs for Saudi citizens. Second, a change must occur in coming up with better regulations as well as a more opportunity for healthier competition, trade and investment as well. By this, a better productivity growth may be produced. Third, a more efficient spending is required as well as finding new sources of income to guarantee fiscal sustainability. This may include taxation and higher energy prices within the Kingdom (Al-Kibsi et al., 2015). Such a huge transformation need all concerned stakeholders to get engaged including the private sector and foreign investors as well as the Saudi citizens. MGI reports stated that “the transition will be challenging, but the new era of economic growth and employment it could usher in would be more sustainable than the oil booms of the past” (Al-Kibsi et al., 2015).

According to the MGI report (Al-Kibsi et al., 2015, p. 9), by 2030, Saudi Arabia needs to reach to (1) doubling its GDP, (2) invest USD 4 trillion in the non-oil economy, and (3) create 6 million jobs for Saudi citizens. This aimed diversification in economy and jobs creation can be found in eight main fields which are (1) mining and metals, (2) petrochemicals, (3) manufacturing, (4) retail and wholesale trade, (5) tourism and hospitality, (6) finance, (7) constructions, and (8) health care.

In April 25th, 2016, the Royal Cabinet, headed by the King of Saudi Arabia, endorsed the implementation of a new roadmap titled “Vision 2030”, which was developed and to be oversighted by the Council of Economic Affairs and Development (Saudi Press Agency, 2016). Vision 2030 is a strategic transformational plan that the Kingdom will execute in order to make a step change in the government performance as well as in the economy and the society away from depending on oil which was, per Ibrahim (2016).

2.5.1 Components of the Plan

Vision 2030 is a perspective with full of passion and will in order to make the change in Saudi Arabia. This roadmap relies on the unique competitive advantages that Saudi Arabia has. They are, per the words of the Chairman of the Council of the Economic Affairs and Development, (1) “our status as the heart of the Arab and Islamic worlds”, (2) “our nation holds strong investment capabilities, which we will harness to stimulate our economy and diversify our revenues”, and (3) “our unique strategic location into a global hub connecting three continents, Asia, Europe and Africa” (Vision 2030, 2016b, p. 6).

There are three main aims for this comprehensive vision. These aims are to have: (1) “A Vibrant Society”, (2) “A Thriving Economy”, and (3) “An Ambitious Nation” (Vision 2030, 2016b, pp. 1-86). Per Ibrahim (2016), the plan focuses on “diverse Saudi economy and deepen balanced and sustainable development through rebuilding productivity foundations, diversifying income sources and modifying the state-society relation” (Ibrahim, 2016). In numbers, referring to Table 8 which summarizes the vision 2030, the vision mentioned several important goals regarding diversifying the economy toward sustainable growth such as:

1. Increasing the revenues from SAR163 billion to 1 trillion annually through the non-oil sector.
2. Increasing the households’ savings up to 10% from its current level of 6% only.
3. Increasing the share of the direct foreign investment in the Saudi GDP from its current level of 3.8% up to 5.7%.
4. Increasing the contribution of the non-oil exports to reach 50% from its current state of 16%.
5. Increasing the contribution of the non-profit sector to reach 5% from its current level of 1%.
6. Increasing the number of Hajj and Umrah performers up to 30 million from its current 8 million level.
7. Increasing the contribution of the private sector to the GDP from its current level of 40% up to 65%.
8. Increasing the contribution of the SMEs in GDP from 20% up to 35%.
9. Decreasing the unemployment current rate from 11.6 to 7%.

For the vision to get executed, the vision 2030 included thirteen execution programs. Per Table 8, these programs are:

1. The Government Restructuring Program

2. The Strategic Directions Program
3. The Fiscal Balance Program
4. The Project Management Program
5. The Performance Measurement Program
6. The Saudi Aramco Strategic Transformation Program
7. The Public Investment Fund Structuring Program
8. The Human Capital Program
9. The National Transformation Program
10. The Regulations Review Program
11. The Program for Strengthening Public Sector Governance
12. The Privatization Program
13. The Strategic Partnership Program

Table 8: Saudi Arabia transformation plan "Vision 2030" summary

Aim I : A VIBRANT SOCIETY with strong Roots, fulfilling lives, and strong foundations.

Aim II: A THRIVING ECONOMY: rewarding opportunities, investing for the long-term, open for business, and investing for the long-term.

Aim III: AN AMBITIOUS NATION - effectively governed & responsibly enabled"

Tools	**Considerations of**	**Goals by 2030**	**Commitments to reach the goals**
1. THE GOVERNMENT RESTRUCTURING PROGRAM *2. THE STRATEGIC DIRECTIONS PROGRAM* *3. THE FISCAL BALANCE PROGRAM* *4. THE PROJECT MANAGEMENT PROGRAM* *5.THE PERFORMANCE MEASUREMENT PROGRAM* *6. THE SAUDI ARAMCO STRATEGIC TRANSFORMATION PROGRAM* *7. THE PUBLIC INVESTMENT FUND*	1. *LIVING BY ISLAMIC VALUES* 2. *FOCUSING OUR EFFORTS TO SERVE UMRAH VISITORS* 3. *TAKING PRIDE IN OUR NATIONAL IDENTITY* 4. *PROMOTING CULTURE AND ENTERTAINMENT* 5. *LIVING HEALTHY, BEING HEALTHY* 6. *DEVELOPING OUR CITIES* 7. *ACHIEVING ENVIRONMENTAL SUSTAINABILITY*	1. *To increase our capacity to welcome Umrah visitors from 8 million to 30 million every year* 2. *To more than double the number of Saudi heritage sites registered with UNESCO* 3. *To have three Saudi cities be recognized in the top-ranked 100 cities in the world* 4. *To increase household spending on cultural and entertainment activities inside the Kingdom from the current level of 2.9% to 6%* 5. *To increase the ratio of individuals exercising at least once a week from 13% of population to 40%* 6. *To raise our position from 26 to 10 in the Social Capital index* 7. *To increase the average life expectancy from 74 years to 80 years* 8. *To lower the rate of unemployment from 11.6% to 7%*	1. *THE HONOR TO SERVE THE INCREASING NUMBER OF UMRAH VISITORS IN THE BEST WAY POSSIBLE* 2. *THE LARGEST ISLAMIC MUSEUM* 3. *“DAEM” MEANINGFUL ENTERTAINMENT FOR CITIZENS* 4. *“IRTIQAA” A MORE PROMINENT ROLE FOR FAMILIES IN THE EDUCATION OF THEIR CHILDREN* 5. *CORPORATIZATION: EFFICIENT AND HIGH QUALITY HEALTH CARE*

RESTRUCTURING PROGRAM *8. THE HUMAN CAPITAL PROGRAM* *9. THE NATIONAL TRANSFORMATION PROGRAM* *10. THE REGULATIONS REVIEW PROGRAM* *11. THE PROGRAM FOR STRENGTHENING PUBLIC SECTOR GOVERNANCE* *12. THE PRIVATIZATION PROGRAM* *13. THE STRATEGIC PARTNERSHIPS PROGRAM*	8. *CARING FOR OUR FAMILIES* 9. *DEVELOPING OUR CHILDREN'S CHARACTER* 10. *EMPOWERING OUR SOCIETY* 11. *CARING FOR OUR HEALTH* 12. *LEARNING FOR WORKING* 13. *BOOSTING OUR SMALL BUSINESSES AND PRODUCTIVE FAMILIES* 14. *PROVIDING EQUAL OPPORTUNITIES* 15. *ATTRACTING THE TALENTS, WE NEED* 16. *MAXIMIZING OUR INVESTMENT CAPABILITIES*	9. *To increase SME contribution to GDP from 20% to 35%* 10. *To increase women's participation in the workforce from 22% to 30%* 11. *To move from our current position as the 19th largest economy in the world into the top 15* 12. *To increase the localization of oil and gas sectors from 40% to 75%* 13. *To increase the Public Investment Fund's assets, from SAR 600 billion to over 7 trillion* 14. *To rise from our current position of 25 to the top 10 countries on the Global Competitiveness Index* 15. *To increase foreign direct investment from 3.8% to the international level of 5.7% of GDP* 16. *To increase the private sector's contribution from 40% to 65% of GDP* 17. *To raise our global ranking in the Logistics Performance Index from 49 to 25 and ensure the Kingdom is a regional leader* 18. *To raise the share of non-oil exports in non-oil GDP from 16% to 50%* 19. *To increase non-oil government revenue from SAR 163 billion to SAR 1 Trillion*	6. *AN EDUCATION THAT CONTRIBUTES TO ECONOMIC GROWTH* 7. *A BIGGER ROLE FOR SMALL AND MEDIUM-SIZED ENTERPRISES* 8. *LOCALIZED DEFENSE INDUSTRIES* 9. *A MINING SECTOR CONTRIBUTING TO THE NATIONAL ECONOMY AT FULL POTENTIAL* 10. *A RENEWABLE ENERGY MARKET* 11. *A RESTRUCTURED KING ABDULLAH FINANCIAL DISTRICT* 12. *A FLOURISHING RETAIL SECTOR* 13. *A DEVELOPED DIGITAL INFRASTRUCTURE* 14. *KING SALMAN PROGRAM FOR HUMAN CAPITAL DEVELOPMENT*

	17. *LAUNCHING OUR PROMISING SECTORS* 18. *PRIVATIZING OUR GOVERNMENT SERVICES* 19. *IMPROVING THE BUSINESS ENVIRONMENT* 20. *REHABILITATING ECONOMIC CITIES* 21. *ESTABLISHING SPECIAL ZONES* 22. *INCREASING THE COMPETITIVENESS OF OUR ENERGY SECTOR* 23. *BUILDING A UNIQUE REGIONAL LOGISTICAL HUB* 24. *INTEGRATING REGIONALLY AND INTERNATIONALLY* 25. *SUPPORTING OUR NATIONAL COMPANIES*	20. *To raise our ranking in the Government Effectiveness Index, from 80 to 20* 21. *To raise our ranking on the E-Government Survey Index from our current position of 36 to be among the top five nations* 22. *To increase household savings from 6% to 10% of total household income* 23. *To raise the non-profit sector's contribution to GDP from less than 1% to 5%* 24. *To rally one million volunteers per year (compared to 11,000 now)*	15. *SHARED SERVICES TO OUR GOVERNMENT AGENCIES* 16. *"QAWAM": INCREASING SPENDING EFFICIENCY* 17. *EFFECTIVE E-GOVERNMENT* 18. *A MORE IMPACTFUL NON-PROFIT SECTOR*

	26. *EMBRACING TRANSPARENCY* 27. *COMMITTING TO EFFICIENTSPENDING AND BALANCED FINANCES* 28. *PROTECTING OUR VITAL RESOURCES* 29. *ENGAGING EVERYONE* 30. *ORGANIZING OURSELVES WITH AGILITY* 31. *BEING RESPONSIBLE FOR OUR LIVES* 32. *BEING RESPONSIBLE IN BUSINESS* 33. *BEING RESPONSIBLE TO SOCIETY*		

2.5.2 Hints on the Impact on the Government Bodies

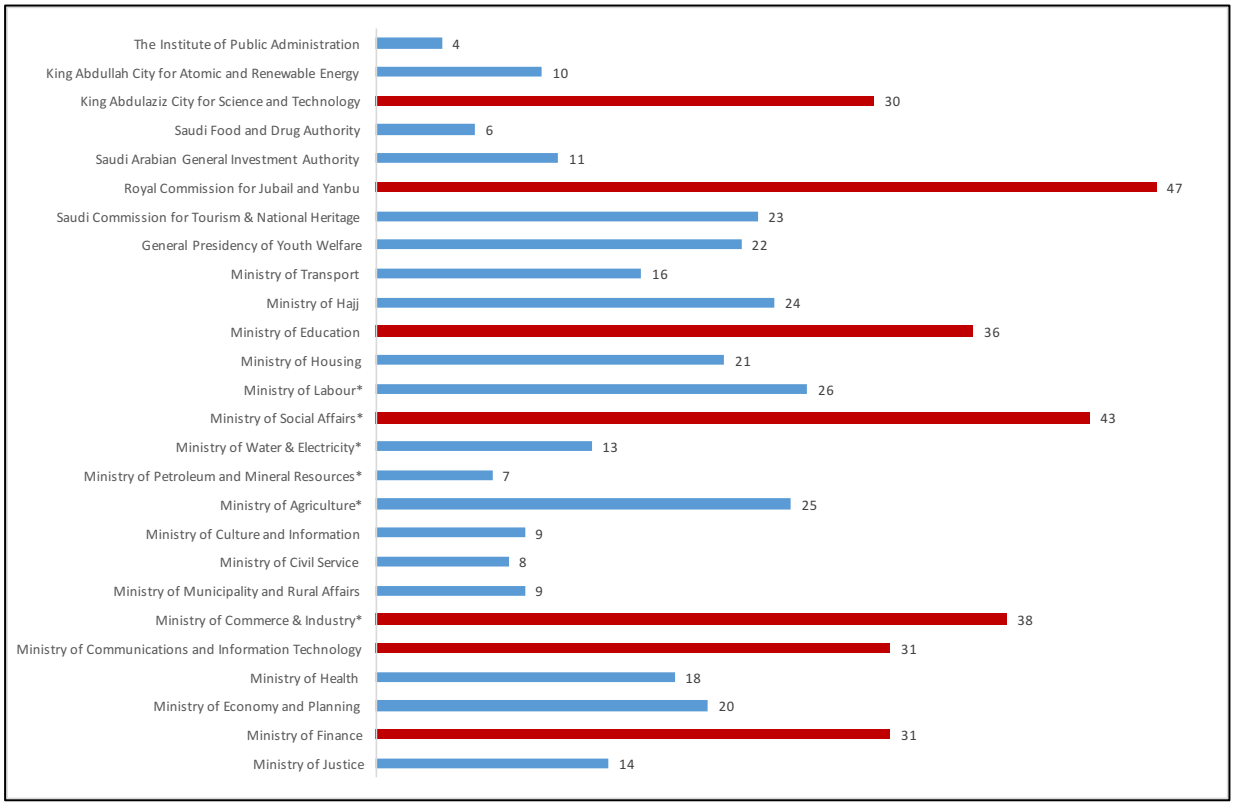
Out of the Vision 2030 roadmap, a sub-plan titled “The National Transformation Program 2020” was launched in June 2016. This plan is dedicated to “ministries, institutions, and government entities underwent a restructuring process to align them to the requirements of this phase” (Vision 2030, 2016a, p. 6). It is “a key part of a blueprint [Vision 2030] to prepare the kingdom for the post-oil era” (Feteha, Nereim, & Mahdi, 2016).

The program, in its first stage identified 24 government bodies with open doors to include more in the future. The purpose of this program is to enable such government institutions to “perform their tasks, and expand their competencies” (Vision 2030, 2016a, p. 6). It is expected through this program, which is one of thirteen defined programs within the Vision 2030, to boost up the quality of services they provide to all concerned parties and beneficiaries. To monitor the re-habilitation process, the Council of Economic Affairs and Development established several bodies such as (1) the National Center for Performance Measurement, (2) the Delivery Unit, and (3) the Project Management Office for this purpose.

Looking at figure 13, which shows the initiatives that were defined in the Transformation 2020 program, in order to enhance the performance of the government bodies, a total number of 542 initiatives are identified, which act as actions to resolve the challenges these entities that preventing them from aligning with the Vision 2030 plan. These initiatives are put to meet specific strategic objectives, covering the 26 government bodies. The number of initiatives for these entities vary from one organization to another. In general, these initiatives, from a high level perspective, focus on specific goals government bodies are to achieve by 2020 including:

1. Assist the non-government sector to provide more than 450,000 jobs in the non-government sector, by 2020.
2. Strengthening the partnership with the private sector in the field of funding these initiatives by about 40%.
3. Maximizing the local content in localizing not less than SAR 270 billion. This is important in order to reduce imports as well as create more jobs to Saudi citizens.
4. In the “Digital Transformation” of the Kingdom, these government bodies will invest in a set of common digital platforms to support their shift in the digital transformation (Vision 2030, 2016a, p. 10).

Figure 13: The 542 initiatives to enhance the performance of government bodies



Note: *" Execution responsibilities will be re-distributed between relevant entities, with reference to the government restructuring"

The first impact of the program on the government bodies was the re-structuring of some of them based on the need to achieve the goals behind the Vision 2030. Table 9 shows the recent approved re-structuring which includes:

1. The Ministry of Commerce of Industry is changed to become the Ministry of Commerce and Investment. The Industry Affairs sector is out of it, but the investment affairs, which was an independent body, became under the umbrella of this new re-structured ministry keeping its name which is the Saudi Arabian General Investment (SAGIA).
2. Merging the Ministry of Agriculture and the Ministry of Water and Electricity into one ministry called the Ministry of Environment, Water and Agriculture.
3. The name of the Ministry of Petroleum and Mineral Resourced is changed to the Ministry of Energy, Industry and Mineral Resources. The Industry affairs, which was under the responsibility of the Ministry of Commerce and Industry, is shifted to this new re-structured government body. Additionally, both the King Abdulaziz City of

Science and Technology and King Abdullah City for Atomic and Renewable Energy became parts of this ministry.

4. Both ministries of labor and social affairs are merged under a new a structure under the name of the Ministry of Labor and Social Development.

Table 9: Vision 2030 impact on the government's bodies' names and structures

S/N	Structure and Name	
	After Vision 2030	**Before Vision 2030**
1	Minstry of Justice	Minstry of Justice
2	Islamic Affairs, Endowment, Dawa and Guidance	Islamic Affairs, Endowment, Dawa and Guidance
3	Ministry of Finance	Ministry of Finance
4	Ministry of Economy and Planning	Ministry of Economy and Planning
5	Ministry of Health	Ministry of Health
6	Technology	Ministry of Communications and Information Technology
7	Ministry of Commerce and Investment	Ministry of Commerce and Industry
8	Ministry of Municipal and Rural Affairs	Ministry of Municipal and Rural Affairs
9	Ministry of Civil Service	Ministry of Civil Service
10	Ministry of Culture and Information	Ministry of Culture and Information
11	Ministry of Environment, Water, and Agriculture	(1) Ministry of Agriculture, (2) Ministry of Water and Electricity
12	Ministry of Energy, Industry, and Mineral Resources	Ministry of Petroleum and Mineral Resources
13	Ministry of Labor and Social Development	(1) Ministry of Labor, (2) Ministry of Social Affairs
14	Ministry of Housing	Ministry of Housing
15	Ministry of Education	Ministry of Education
16	Ministry of Transportation	Ministry of Transportation
17	Ministry of Haj and Umrah	Ministry of Haj and Umrah
18	Ministry of Interior	Ministry of Interior
19	Minsstry of Foreighn Affairs	Minsstry of Foreighn Affairs
20	Ministry of Defence	Ministry of Defence
21	Saudi Commission for Tourism and National Heritage	Saudi Commission for Tourism and National Heritage
22	Sports Authority	General Presidency of Youth Welfare
23	Royal Commission for Jubail and Yanbu	Royal Commission for Jubail and Yanbu
24	King Abdulaziz City for Science and Technology	King Abdulaziz City for Science and Technology
25	King Abdullah City for Atomic and Renewable Energy	King Abdullah City for Atomic and Renewable Energy
26	Institute of Public Administration	Institute of Public Administration
27	Saudi Arabian General Investment Authority	Saudi Arabian General Investment Authority
28	Saudi Food and Drug Authority	Saudi Food and Drug Authority

Back again to the script of the National Transformation 2020 program, the initiatives, which are the strategic objectives to be achieved, are not left as is. In fact, sets of Key Performance Index (KPI) were identified in order to monitor and measure the progress for each initiative and within each government body. Figure 14 shows the number of strategic objectives to be achieved compared with the KPIs for each government body. Obviously, the transformation touched all bodies. However, it is noticeable that higher number of strategic objectives appear within the institutions that have direct connection to the economy and the society. For instance, the Ministry of Health has 16 objectives. Ministry of Water, Electricity and Agriculture has 16. Also, the Ministry of Labor and Social Development has 13. On the other hand, the Ministry of Energy, Industry and Mineral

Resources has 15 objectives and the Ministry of Communication and Information Technology has 10.

Figure 14: Number of strategic objectives in the Transformation 2020 Plan

Participant	Number of strategic objectives	Number of indicators	Number of targets
Ministry of Justice	7	21	19
Ministry of Finance	6	12	12
Ministry of Economy and Planning	6	13	7
Ministry of Health	16	17	16
Ministry of Communications and Information Technology	10	17	17
Ministry of Commerce and Investment	7	10	9
Ministry of Municipal and Rural Affairs	7	25	24
Ministry of Civil Service	5	11	11
Ministry of Culture and Information	4	10	9
Ministry of Environment, Water, and Agriculture	16	35	35
Ministry of Energy, Industry, and Mineral Resources	15	24	24
Ministry of Labor and Social Development	13	37	37
Ministry of Housing	3	11	11
Ministry of Education	8	20	19
Ministry of Transportation	9	15	15
Ministry of Haj and Umrah	5	15	10
Saudi Commission for Tourism and National Heritage	4	16	16
Sports Authority	4	7	5
Royal Commission for Jubail and Yanbu	9	12	10
King Abdulaziz City for Science and Technology	7	12	12
King Abdullah City for Atomic and Renewable Energy	4	8	8
Institute of Public Administration	2	4	4
Saudi Arabian General Investment Authority	5	12	11
Saudi Food and Drug Authority	6	7	5
Total	**178**	**371**	**346**

Source: The National Transformation 2020 Program

2.5.3 Hints on the Impact on the Society

The Vision 2030 includes a very clear statement in regard to jobs opportunities. The statement says “Our economy will provide opportunities for everyone – men and women, young and old” (Vision 2030, 2016b, p. 36). Per a report on Bloomberg (Fattah, Nereim, Almashabi, & Khraiche, 2016), the Vision 2030 impact on the Saudi society takes several

directions. First, the unemployment issue will be handled as the plan is to reduce the unemployment rate from 11.6% to 7%. Jobs creation is a critical issue to Saudi Arabia.

Second, the education system in the Kingdom is to be revamped. This is mandatory if “young Saudis are to compete for 21st century jobs” (Salameh, 2016). Per the report, this issue is a key element of the plan where “the educational curriculum and university majors will be restructured to mesh with the vision” (Fattah et al., 2016).

Third, raising the home-ownership to 47% is an important goal. Right now, the percentage of Saudis owning homes is 52%. The Bloomberg report states that the plan says to increase the participation of Saudi women from its current level of 22% to 30% yet the plan did not touch the issue of lifting the ban on women driving. However, speaking loudly about the engagement of women becomes a critical issue that is likely to get its own space in the plan. Hashem (2006) believes that several factors are stressing the government to take action in this dossier especially that “exposure through the advancement in global communications, in addition to external political pressures are perceived as contributing factors” (2006, p. 1) to a such reconstruction within Saudi Arabia.

The plan for reforming and restructuring the primary health care estimated to cost 4.7 billion riyals. The health care is a critical issue. The National Transformation 2020 program will focus on re-habiltate this sector through 16 strategic objectives. The known information in this part is that the private sector will be given the opportunity to get into this field of service providing. This is addition to implement unified digital medical record system in the Kingdom by 2020 (Feteha et al., 2016).

Additionally, the plan will work to build tourism in the Kingdom, mainly in areas such as history, cultural, and natural locations. Such areas is expected to have a high value to the society as well to the economy (Fattah et al., 2016). However, without the political will to make the change, the plan “may not achieve much since it's not bold enough in the area that matters most -- developing human capital” (Salameh, 2016).

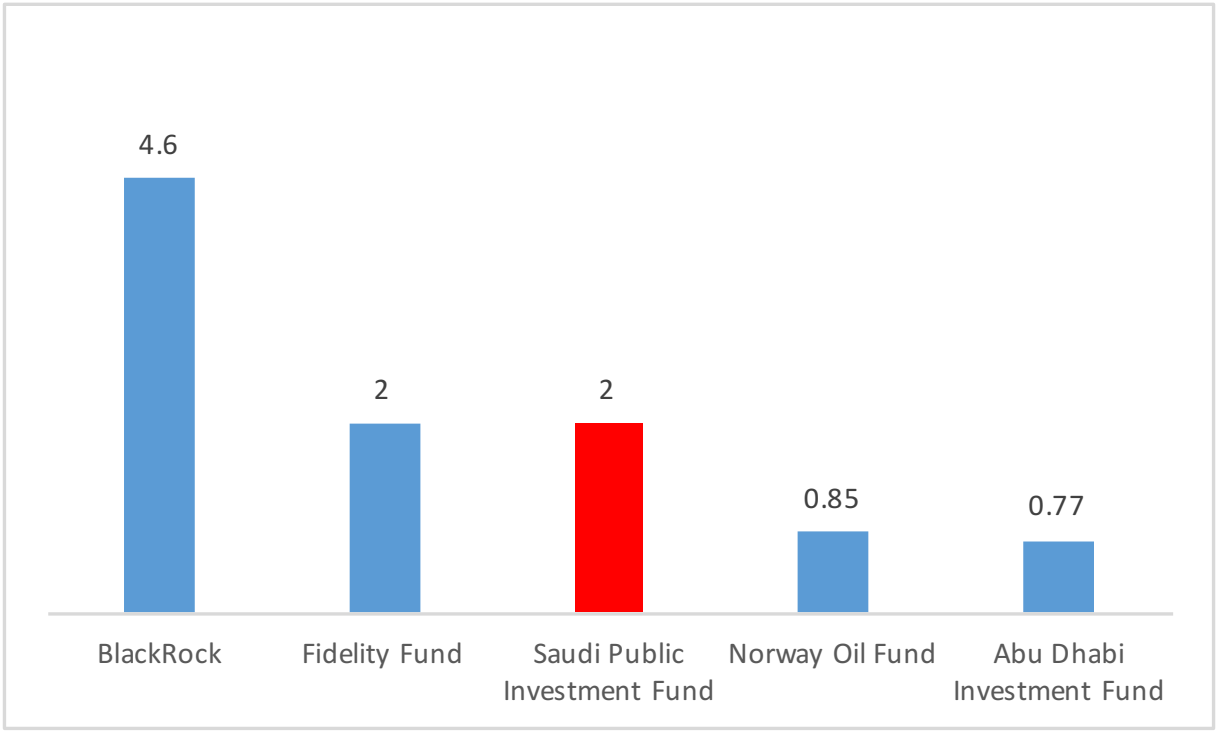
2.5.4 Hints on the Impact on the Revenue and Investment

Several initiatives will cause significant contribution to the revenue and investment areas. First, according to Fateha, et. al. (2016), the program states that oil production is expected to be at the level of 12.5 million bpd by 2020. The refining capacity will increase to 3.3 million bpd from 2.9 million. The dry gas to increase its production from the current level of 12 billion up to 17.8 billion cubic feet per day. The mining sector is to increase from its current level of contribution by SAR 64 billion up to SAR 97 billion. This is almost

50% increase in this sector's contribution to the economy. Also, the renewable energy is planned to cover 4% of the Kingdom's needed power.

Second, is the sale of 5% of the state-owned Saudi Aramco, which is the national oil company of the Kingdom that will be traded in the local and international stock market. The evaluation of the Company is not set yet, per Bloomberg report (Fattah et al., 2016). However, such a move will shift Saudi Aramco to become "a global industrial conglomerate" (Salameh, 2016). This move will work on increasing this fund to be USD 2 trillion by adding the Aramco IPO as well as additional other assets that worth USD 300 billion to the current USD 200 billion fund. As shown in figure 15, this will make the Saudi Public Investment Fund among the largest (Fattah et al., 2016).

Figure 15: Assets under management in $trillion estimate



Source: Bloomberg, 2016

2.5.5 Hints on the Impact on the Private Sector and SMEs Development

Two main areas are clear that are impacted due to the execution of the National Transformation 2020 program, which is one of thirteen programs the Vision 2030 will execute. First, a high attention is given to the private sector as a genuine partner in the process of transformation. A SAR 300 million is budgeted to build the "Center of Excellence" that will monitor the privatization of some state-owned bodies mainly in the

facilities sector. With the reduction plan of the number of government employees, the program will help the private sector to create 450,000 jobs by 2020. Also, the role of women is a significant subject as the program focuses on increasing their engagement within the Saudi workforce (Feteha et al., 2016). Moreover, the private sector is expected to increase the non-oil exports from its current volume of SAR 185 billion. This is in addition to increase the foreign investment to SAR 70 billion from its current level of SAR 30 billion only. With the intention of localizing SAR 270 billion worth of products and services, the Royal Commission for Jubail (on the East coast) and Yanbu (on the West coast) are have high number of 47 initiatives to work in this direction. Jubail and Yanbu are two industrial cities that "play a major role in supporting the manufacturing sector through the establishment of the plastic, chemical [ ] and manufacturing industries for the production of consuming finished products" (Al-Sughair, 2016a).

The second impacted area is entrepreneurship and SMEs sector. Vision 2030 put valuable weight on the issue of entrepreneurship and small and medium-sized enterprises (SMEs) as this sector is "among the most important agents of economic growth" (Vision 2030, 2016b, p. 36). The National Transformation 2020 program elaborated on the official perspective as it tells that there is a real understanding that the SMEs sector can "create jobs, support innovation and boost exports" (Vision 2030, 2016b, p. 36). The program, which is in execution right now, reflects the government's perspective that the SMEs sector in Saudi Arabia is not yet a major contributor to the GDP as it supposed to be likewise in other emerged and advanced economies. Thus, there is a plan to support entrepreneurship and SMEs mainly in new industries. For this significant reason and to achieve this goal, a dedicated new SMEs Authority was established. Encouraging entrepreneurs is the intention of the government. From the government side, entrepreneurs will be helped through restructuring with "business-friendly regulations, easier access to funding, international partnerships and a greater share of national procurement and government bids" (Vision 2030, 2016b, p. 36). According to the Vision 2030 plan, the current SMEs sector's contribution to the GDP is 20%, whereas, such sector's contribution may reach up to 70% as in some advanced economies. It is obvious that the plan assessed the major challenges this sector is facing such as that SMEs suffer unnecessarily legal and administrative procedures, struggle to "attract the necessary skills, capabilities and funding with financial institutions providing no more than 5% of the overall funding - a far lower percentage than the global average" (Vision 2030, 2016b, p. 36). The plan is to encourage funding institutes to assign up to 20% of their capacity to SMEs by 2030 (Vision 2030, 2016b, p. 36).

In this area, in addition to the establishment of the SMEs Authority, on 2nd of August, 2016, a SAR 4 billion holding fund was approved by the Council of Ministers, based on the recommendations of the Council of the Economic Affairs and Development, to “invest in venture capital and private ownership funds to boost investments in small and medium enterprises (SMEs)” (Saudi Gazette, 2016a). Furthermore, the Council of Ministers approved the work on establishing “a professional society aimed at upgrading the vocational and professional standard of the venture capital and private ownership sector” (Saudi Gazette, 2016a). Moreover, an important initiative called 9/10ths was launched in late August same year. This is “an innovative suite of services designed to foster startups and help businesses grow” (9/10ths, 2016). This program is a result of a mutual collaboration between the new established SMEs Authority and the Human Resources Development Fund. The program looks as a platform to help entrepreneurs and SMEs to access to different options of funds, being assisted to bid for government agencies, get to markets, get access to a startup accelerator services such as training, and give the opportunities to entrepreneurs and SMEs to post their own products and services to public access (9/10ths, 2016). A such platform is most likely will “aid entrepreneurs in developing their skills and networks. We will also support SMEs in marketing and help export their products and services, by leveraging e-commerce” (Vision 2030, 2016b, p. 36). It is obvious that actions are taken immediately regarding supporting entrepreneurs and SMEs development. This reflects the urgency and the focus on this important subject due to its importance regarding the contribution of this sector to the GDP.

Finally, the microfinance venturing is not out of the scope as productive families are important to the economy and the society. However, the vision puts the support of this part under motivating the establishment of such microfinance business through non-profit funding and support facilities (Vision 2030, 2016b, p. 36).

2.6 Summary and Potential Contribution to Literature

This chapter gives the reader three main overviews about Saudi Arabia. First, a quick historical background of the Kingdom as a mundane existence, formation as a state, people and a hint of its wealth and influence globally. It is evident that the location of the Kingdom is a strategic geographically where it links between two continents with a path to a third. In the current days, it is shown that Saudi Arabia enjoys political stability, and it is trying its best to develop itself despite the challenges it faces.

Second, this chapter gives a hint on the economy where the development approach the country follows, which is the five-year development plan that was put in collaboration with the UNDP in the late of the 1960's. Through the journey over this approach starting from 1970, a wider window shows how Saudi Arabia plans its development based on a single commodity, which is oil, and the risk of such commodity's prices fluctuation in the international market. Additionally, the main government bodies, which are linked directly to the Saudi economy, are explored to connect some dots related to the economy such as the Council of Economic Affairs and Development and Affairs Ministry of Energy, Industry and Mineral Resources, Finance, Commerce and Investment, and Economy and Planning.

Third, this chapter went through the main socio-economic challenges that Saudi Arabia is giving the priority to deal with as time is running out within the current challenging circumstances and the need to build a 21st-century economy. A big challenge is diversifying the Saudi economy away from being oil dependent. Also, working on preparing the economy to work within the obligation of being a member of the WTO. At the same time, dealing with the high increase in the population and the need to create jobs for Saudi citizens.

However, the Kingdom started a new transformation plan under the name of "Vision 2030". This subject is the fourth one within this chapter where an identification of the scheme, its components are explored. Also, some hints on the potential impacts of this plan on different stakeholder are discussed within the boundary of the current limited available information. For instance, the Vision 2030 identified thirteen transformation programs. The first one in progress is the National Transformation 2020. This program identifies the strategic objectives for 24 government bodies to achieve by 2020. This program, also, identifies, the KPIs that will be used to measure and evaluate the progress in achieving such objectives. The announcement of this radical transformation plan is still new. Thus, a detailed analysis is not available. However, few appeared locally and internationally handling the issue with big questions regarding its reliability such as Al-Harthi (2016), who questions the subject of human capital absence in the plan, or Salameh (2016) of the World Bank, who wonder to what extent this plan may succeed in making the desired change as the challenges in front of it is not that easy. It is obvious that the Vision 2030 is a paradigm shift for the Kingdom to enter the 21st century with a healthier economy and society. However, still it is early to know the details of this paradigm shift. Very little is known about the details of these initiatives that the National Transformation 2020 program stated (Feteha et al., 2016). Additionally, the researcher

did not find any thesis or a dissertation, at the time of writing, that mentioned the plan and this is natural as the subject is too new. However, this chapter of this thesis may provide a door for a future researcher to start researching in the “vision 2030” and its execution programs.

CHAPTER THREE: OVERVIEW OF ENTREPRENEURSHIP AND SMEs IN SAUDI ARABIA

3.1 Introduction

In chapter two, which provided an overview of Saudi Arabia from its foundation to the 2020/2030 transformation plans, we saw the impact of a single-commodity based economy on the Kingdom and its people. The consequences of relying on oil as the overriding source of income were elaborated through examination of a set of major socio-economic challenges on which the Kingdom's leaders are currently focusing. These challenges are broad, complex, and intertwined, and it is clear that meeting them will require a substantial contribution from the private sector in order to diversify the Saudi economy and create jobs for Saudi citizens. Within the private sector, the transformation plan has identified entrepreneurship and SMEs development as a focal point, setting the target of increasing the contribution of these sub-sectors to GDP from the current level of 20% to 35% by 2030 (Vision 2030, 2016b).

The present chapter shines a spotlight on Saudi Arabia's entrepreneurship and SMEs development ecosystem. By examining this sub-sector in detail, the chapter will provide insight vital to rationalizing the study's theoretical foundation, deriving its hypotheses, and exposing areas in which further research is needed (Webster & Watson, 2002). Accordingly, the chapter addresses, in order, the following topics: (1) the evolution of Saudi entrepreneurship and SMEs as seen through the literature, (2) the current innovation and entrepreneurial environment, (3) SMEs' current state and contribution to GDP and employment, (4) the organizations and programs that support financing and training for Saudi entrepreneurship and SMEs development, (5) explanation of the weak SMEs performance and growth drivers, (6) potential growth drivers to strengthen SMEs' performance, and (7) summary and potential contribution to practice and literature.

3.2 The Evolution of Saudi Entrepreneurship and SMEs as Seen through the Literature

Before looking at the current entrepreneurship and SMEs ecosystem's condition and contribution to the Saudi economy, it is important to note that literature in this regard is sporadic and is limited in scope and coverage Abousaber, (2013); Alfaadhel, (2010); Aljarallah, (2010); Alshardan, (2016); Ashoor, (2013); Binzomah, (2008)**;** Hertog, (2010).

Thus, the researcher has chosen to organize this review chronologically rather than by topic, in order to give the clearest possible picture of the evolution of this sub-sector of the Saudi economy. In the researcher's assessment, the literature on entrepreneurship and on the development of the SMEs ecosystem can best be understood by examining three phases: (1) its beginnings in the late 1950s, (2) the response to the new growth of entrepreneurial ventures and SMEs around 2004-2005, and (3) recent, more detailed discussions of matters related to the survival of this sub-sector after being introduced as an important matter in the Saudi economy in 2010.

In what is widely regarded as the first important article on entrepreneurship and SMEs formation in Saudi Arabia, Farmer (1959) pointed out the need for the recently created Arabian American Oil Company (Aramco)[9] to have around it an SMEs community in order to assist in its non-core businesses. In addition, Farmer pointed to the significant role of corporations in supporting entrepreneurs to build such ventures as well as in building local economies. Aramco (currently known as Saudi Aramco) started such a program with two entrepreneurs in the late 1940s. As Aramco's operations expanded exponentially, however, it became clear that there was a need to outsource certain functions to SMEs. According to Farmer, the subsequent business development work engaged in by Aramco to fill this need in the early 1950s is essentially the origin of Saudi SMEs. Since that time, and over its history until it became fully owned by the Saudi government (see Figure 16), Aramco has continued the evolutionary work of developing entrepreneurs, creating SMEs, and generally helping to grow the Saudi economy (see Figure 17).

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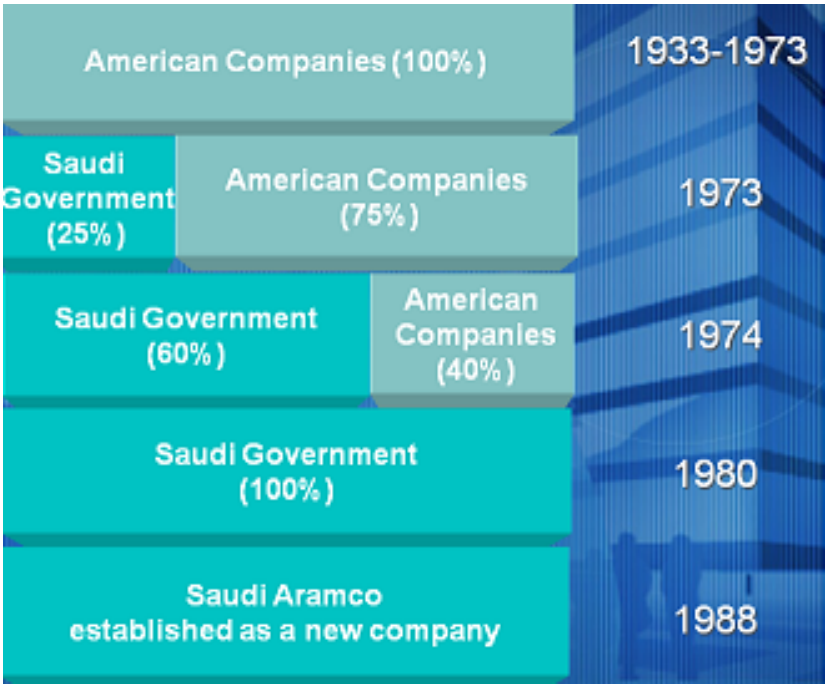
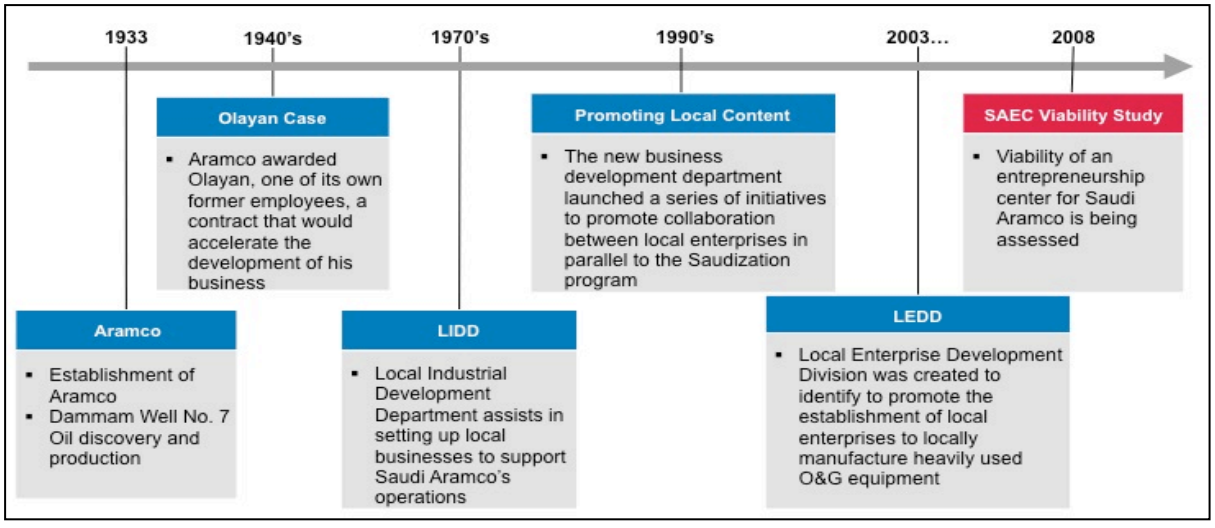
[9] In 1927, the British company, Eastern and General Syndicate Limited, had a concession agreement, which was nullified due to the fact that it did not exercise its right to explore for oil, which started in 1923. In May 1933, King Abdulaziz of Saudi Arabia approved a 66-year concession to the U.S. Standard Oil of California (SOCAL) to explore about 920,000 square kilometers in the Eastern Region of the Kingdom for hydrocarbon resources. In 1938, Saudi Arabia became a member of the international Petroleum Industry, loading the first commercial export tanker in 1939. Due to the promising business based on the huge oil finds, a joint venture started in 1936. SOCAL, which was looking to meet the future oil demands of the United States from other sources, sold 50% of its interest to another U.S. oil company, Texas Company (TEXACO). In 1939, the new joint venture signed a supplementary agreement with the Saudi Arabian government to add additional 200,000 square kilometers to the original agreement covering areas on boarders with Kuwait and Iraq . In 1944, the subject joint venture was given a new name which was the Arabian American Oil Company (ARAMCO). Standard Oil Company of New Jersey (Exxon) and Socony-Vacuum Oil (Mobil) increased the size of the partnership by joining in owning Aramco in March 1947. In 1988, the Company became fully state-owned under the name of Saudi Arabian Oil Company (Saudi Aramco).

Figure 16: Saudi Arabian Oil Company ownership transfer history



Source: Saudi Aramco Annual Report, 2004

Figure 17: Saudi Aramco's historical support for Entrepreneurship and SMEs development



Source: Saudi Aramco Entrepreneurship Center Assessment Report (Booz&Co., 2008)

After Farmer (1959), there is a significant gap before substantial writings on the Saudi economy began again to appear and works that did emerge had little to say about the role of entrepreneurship and SMEs in the Kingdom. Among the exceptions, Hajjar and Presley (1992) analysed reasons for Saudi SMEs' poor performance and emphasized the need to give the entrepreneurship and SMEs sector closer attention as part of efforts to develop a healthier private sector within the Saudi economy. According to Abalkhail

(1999), at least two other sources unavailable to the present author (Al-Hajjar, 1989; Chamber of Commerce Council, 1994) discussed the significance of SMEs in the Saudi economy, and both focused on financing for SMEs as the major obstacle standing in the way of their development. Further on the government side, the Council of Saudi Chambers of Commerce and Industry presented a report on the reasons underlying the weak contribution of the SMEs sector within the Saudi economy at King Saud University in Riyadh (Chamber of Commerce Council, 1997). According to the report, the weakness was attributable to several internal and external factors. Lack of expertise in developing feasibility studies and business plans, lack of management and accounting skills, as well as the lack of access to capital were the major internal obstacles cited. Externally, the cause was ascribed to the environment in which the SMEs operate. Factors in this regard included the lack of an innovation ecosystem, lack of access to markets, and lack of incentives for purchasing programs. Per the report, such obstacles needed to be alleviated so that the full potential for entrepreneurs and SMEs could be unleashed (Chamber of Commerce Council, 1997).

The second phase of literature discussing entrepreneurship and SMEs in Saudi Arabia began with the seventh Saudi five-year development plan (2000-2004), which was the first to mention the significant role of the private sector in diversifying the Saudi economy (SYED, 2012). By this time, signals had started to appear about Saudi Arabia joining the WTO, and the private sector had started to shine as a more important contributor to the Saudi economy. As a result, entrepreneurship and SMEs development began to receive greater attention in the literature. Looney (2004) was one of the pioneers in this phase, focusing on the need to develop an efficient private sector that encompasses small businesses, as well as on the obstacles to this goal. The latter, in his view, included lack of access to credit financing and capital, limited access to information, outdated regulatory frameworks, and the high cost of complying with national and international standards, which was exacerbated by the demands of membership in the WTO. Further, Looney expressed concern about the high level of unemployment among Saudi youth, which he said “has the potential of becoming a fully-fledged economic crisis, perhaps severe enough to destabilize the regime and bring a new era of uncertainty to the kingdom” (Looney, 2004b, p. 1). Without a healthy private sector, Looney further asserted, the economy’s absorptive labour capacity is restricted to a minority of new labour entrants, and this situation can only be improved by diversifying the economy away from oil.

Professor Michael Porter of Harvard Business School published a series of important

articles on the Saudi economy during the period 2008-2010 (2008; 2009; 2010). These papers addressed the economic challenges that Saudi Arabia faced and presented arguments for how to improve its economic competitiveness. In the first, he noted that the Kingdom "registered sound macroeconomic policies, but transparency remains limited" and argued that education, skills market information, and innovation capacity should be areas of focus in improving the business environment and the nation's competitiveness, along with fostering entrepreneurship and developing SMEs (Porter, 2008). His 2009 study entitled "Competitiveness and the State of Entrepreneurship in Saudi Arabia" focused on this latter point. To examine the ease of doing business in the Kingdom, Porter (2009) assessed eleven areas based on a 2009 World Bank report. Critical challenges were identified in the following areas: (1) frequent business closures (regulations); (2) getting credit (financing); and (3) enforcing contracts (business environment and transparency). Subsequently, Porter (2010) cited the need to create jobs and diversify the economy as most important for the Kingdom, while also stressing the need to improve entrepreneurship education and reform the financial sector.

The third phase of literature on entrepreneurship and SMEs in Saudi Arabia began to take a more pragmatic direction in terms of discussing critical matters in more detail and focusing on the health of the business ecosystem. By this time, more entrepreneurs had established ventures, or were struggling to do so, and numbers of developers and financiers had also increased. Hence, analyses began to look closely at such issues as women entrepreneurs, professionalism for entrepreneurs, entrepreneurial education and training, and financing. Women entrepreneurs were discussed in the context of the need to develop young Saudi entrepreneurs to participate in the development process of the Saudi economy and society (Minkus-McKenna, 2009). Entrepreneurship education was addressed by Almahdi and Dickson (2010), who questioned the quality of existing entrepreneurial education and examined the responsibility and function of higher education institutions in Saudi Arabia in this regard. In addition, improving training for both the demand side (entrepreneurs) and the supply side (providers and policymakers) was one of the important recommendations in Alfaadhel's (2010) research on the success factors for SMEs in Saudi Arabia.

Although entrepreneurship and SMEs development had already become a strategic focus for the Saudi state, Kayed and Hassan (2011) pointed out that empirical research on this issue was "still in the exploratory stage" (p. 2). Nonetheless, more researchers joined the effort to enrich the literature in this area. The article "Scientist Entrepreneurship in Saudi Arabia" (Alshumaimri, Aldridge, & Audretsch,(2011) was a first of its kind,

emphasizing the significance of scientists in fostering entrepreneurship in the Kingdom. Later, Kayed and Hassan (2013) considered the significant roles of universities and policymakers in connection with entrepreneurship education and concluded that neither were treating the issue with sufficient priority. Khan (2013) explored the entrepreneurship ecosystem in the Kingdom and argued that entrepreneurship education, along with venture capital and business incubators, was a key driver of economic growth. He also noted the lack of organized information and databases as a key limitation on the Saudi business ecosystem, something that subsequent studies have continued to assert. Indeed, as Zafar, Almaleh, Alshahri, and Alqahtani (2015) point out, information on what changes or updates are happening in the business environment is crucial to the survival and growth of entrepreneurial ventures and SMEs.

Al Bakr (2016), Chief Economist of the Saudi Arabian Monetary Agency (SAMA, i.e., the Central Bank of Saudi Arabia), discusses entrepreneurship and SMEs development in Saudi Arabia and how to make this ecosystem contribute to the move toward a more production-based economy. He presents comparisons to the United Arab Emirates and South Korea to show what Saudi Arabia is missing in terms of providing support for SMEs performance and facilitating more financial help for them. Writing deliberately from an investors' perspective (personal communication, 5 October, 2016), Khalid Sulaimani, a serial entrepreneur and investor in Saudi Arabia, contributed a book entitled *84 Tips to a Successful Business Startup,* which provides answers to common questions for start-up entrepreneurs ((2015). The book quickly acquired a strong reputation in Saudi Arabia and was printed four times between 2015 and 2016 owing to demand at home and throughout the MENA region. Burton's (2016) *Business and Entrepreneurship in Saudi Arabia* is another valuable recent resource; the work explores "business in the Kingdom and how change occurring within the Kingdom is transforming how business in done" (Burton, 2016 p. ix). After discussing the government's intention to diversify the Saudi economy and the significance of entrepreneurship in this process, Burton (2016) focuses on opportunities and on the commercial relationship between Saudi Arabia and the outside world, especially the United States. Clearly, his intention is to map parts of the Saudi business ecosystem to help potential U.S. investors and entrepreneurs know what partnering opportunities can be found in Saudi Arabia. Contributions like those of Sulaimani (2015) and Burton (2016) indicate an awareness of the significance of the investors' role in educating entrepreneurs, which is increasingly important as the ecosystem evolves.

Recent years have also seen an increase in significant contributions to the literature from Saudi postgraduate degree candidates and graduates, as well as from academic institutes such as Prince Mohammad Bin Salman College and Babson College. The King Abdullah Scholarship Program has provided many Saudi male and female students with opportunities to receive higher education from respected educational institutes around the world, primarily in North America, the United Kingdom, and Australia. Works by participants in these programs include Binzomah (2008), who identified challenges facing Saudi entrepreneurs and SMEs in the area of financing. Alfaadhel (2010), similarly, identified success factors for Saudi entrepreneurs and found a major gap in the area of training. Alsheikh (2011) explored the role of incubators and universities in relation to economic development. Abousaber (2013) looked at the challenge of poor data sources and found that it is time consuming and difficult to obtain information in Saudi Arabia. Policymaking is a subject of discussion for Algarny (2016), who states that despite the foundation of the SMEs Authority in Saudi Arabia in 2015, entrepreneurship policy remains unclear. All in all, Saudi postgraduates' contributions in this field have become prominent.

In general, the evolution of literature about entrepreneurship and SMEs development in Saudi Arabia has taken a healthier direction in recent years. In the opinion of the researcher, this is due in part to a burgeoning of interest in the Kingdom in the international business arena. Important factors in this regard include Saudi Arabia's accession to G20 membership, the openness of its economy to foreign investment due to its WTO membership, and the Kingdom's strategic transformation plan, Vision 2030, which gives the private sector a more important role in diversifying the economy. In addition, The King Abdullah Scholarship Program, as noted, has produced highly educated Saudis who are now contributing significantly to Saudi economic research.

Table 10 summarizes the key issues and concerns discussed across the three phases of the literature identified and discussed above. Many of the works mentioned propose strategies to foster and strengthen the role of entrepreneurship and SMEs within the private sector, which is widely considered important in achieving the goals of job creation, economic diversification, and overall economic health. However, the greatest share of attention is clearly given to the pressing need to foster access to financing, which can be crucial to getting entrepreneurs into the ecosystem so that they can pursue business opportunities. In addition, since 1997 the literature has emphasized the importance of quality entrepreneurship education and training. Indeed, Saudi Arabia is a young country with a youthful population, where opportunities are plentiful; nonetheless, the literature

suggests that policymakers need to give more attention to developing ways to foster entrepreneurial education while facilitating access to financing for new ventures.

Table 10: Summary of selected studies on Saudi Entrepreneurship and SMEs, 1959-2016

Subject	**Study**	**Highlight(s)**
Significance and Status of Entrepreneurship and SMEs	Farmer (1959)	First to write about entrepreneurship and SMEs in Saudi Arabia and the role of Saudi Aramco.
	Hajjar and Presley (1992)	Second to mention the significance of small businesses to create a healthier private sector in Saudi Arabia.
	Looney (2004)	Expresses the need for small business to provide jobs for the young Saudi population to insure sustainability to Saudi Arabia.
	Council of Saudi Chambers of Commerce and Industry (2007)	First government agency to explore rationale behind the weak performance of SMEs in Saudi Arabia.
	Porter (2008, 2009, 2010)	Calls to unleash entrepreneurship to foster the competitiveness of the Saudi economy.
	Al Bakr (2016)	Focuses on moving toward a production based economy through SMEs.
	Global Entrepreneurship Monitor (2017)	A comprehensive report on the entrepreneurship and SMEs sector.
Entrepreneurs' Development; Entrepreneurship Education; Role of Universities in Entrepreneurship Education	Sadi (2010)	The role of universities.
	Almahdi and Dickson (2010)	Question the quality of the existing entrepreneurial education, exploring the responsibility and function of Higher Education Institutions in

		entrepreneurship education in Saudi Arabia.
	Alfaadhel, 2010	Identifies the quality training to entrepreneurs as an existing support gap in Saudi Arabia.
	Alsheikh (2011)	Identifies the significance of incubators in university and the poor networking of entrepreneurs toward funding.
	Alshumaimri, Aldridge, and Audretsch, 2011	Identifies the role of scientist entrepreneurs and the role of universities in fostering entrepreneurship in Saudi Arabia.
	Kayed and Hassan, 2013	Emphasize the role of universities and policymakers in considering education and training to entrepreneurs.
	Khan (2013)	Defines the significance of training for entrepreneurs as the significance of funding toward economic growth.
Access to Financing; Investment in Entrepreneurs and SMEs	Abalkhail (1999); Looney (2004); Council of Saudi Chambers of Commerce and Industry (1994, 1997, 2007); Porter (2008, 2009, 2010); Binzomah (2008)	Expressed the challenge of accessing to finance in front of entrepreneurs toward building SMEs in Saudi Arabia.
	Burton, 2016	Identifies entrepreneurs and SMEs in Saudi Arabia in front of potential partnership to US investors and entrepreneurs.

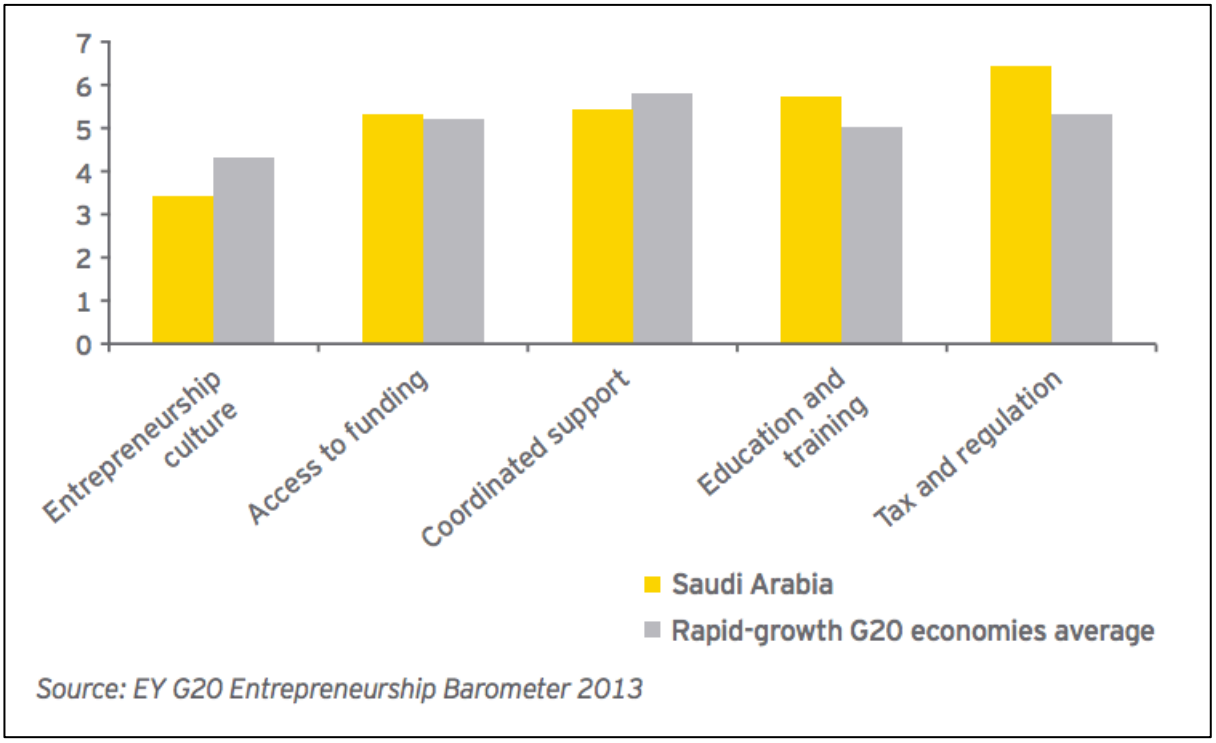
3.3 The Current Status of Innovation and Entrepreneurship in Saudi Arabia

3.3.1 The Status of the Entrepreneurship Ecosystem

Ashoor (2013) states that there is general agreement among experts in the GCC area that Gulf States' economies, including Saudi Arabia's, will not succeed in the future if SMEs do not contribute substantially. Recent assessments suggest that Saudi Arabia has made progress in this area, but that challenges remain. For example, in the World Bank ranking for entrepreneurship culture, Saudi Arabia shifted from 38th among 185 countries in 2006 to 22nd in 2013 (Abu-Sharkh & AlShubaili, 2013). In addition, the 2013 G20 Entrepreneurship Barometer report acknowledged the nation's "laudable efforts to reform its overall business environment in recent years" (Abu-Sharkh & AlShubaili, 2013, p. 2). The report also noted, however, that a tough cultural shift is still required.

The G20 report breaks entrepreneurship down into five 'pillars' or fundamental categories, on which nations are assessed and ranked: entrepreneurship culture, access to funding, coordinated support, education and training, and tax and regulations. Overall, Saudi rankings showed diverse strengths and weaknesses. For entrepreneurship culture, the Kingdom is still considered risk averse and weak in spending on research and development, and it ranked at the bottom of the G20. By contrast, Saudi Arabia ranked first in tax and regulation (for example, G20 entrepreneurs spend an average of about 374 hours per year on tax preparation, but in Saudi Arabia the average is only 77 hours). Other scores were more toward the median: 13th for access to funding, 12th for education and training, and 12th for coordinated support. Despite respectable rankings, however, there is evidence of need for further improvement in the latter two areas. First, in a 2013 survey, 83% of local entrepreneurs said that special training was needed to become real entrepreneurs, and 43% of entrepreneurs affirmed that their progress was facilitated by industry-specific training. In terms of coordinated support, the surveyed entrepreneurs stated that clubs and start-up incubators that had begun to appear had provided them with important assistance. Nonetheless, the report states that this area is a core matter that needs more improvement in order to help Saudi entrepreneurs perform better (Abu-Sharkh & AlShubaili, 2013).

Figure 18: Saudi Arabia's 2013 five pillar scores compared to rapid-growth G20 economies



Screenshot is from the G20 Entrepreneurship Barometer Report, 2013

The next major informational milestone on entrepreneurship status in Saudi Arabia was the comprehensive report published in March of 2017 by the *Global Entrepreneurship Monitor* (GEM), in collaboration with Prince Mohammad Bin Salman College (MBSC) and Babson Global Center for Leadership and Entrepreneurship (BGCLE). This report evaluated the entrepreneurship environment in 66 countries—including such leading economies as the United States, the United Kingdom, and Germany—across 12 critical categories or "framework conditions" (la Vega, Roomi, Ashri, & MartÍnez, 2017). As Table 11 shows, only in *physical infrastructure* did Saudi Arabia rank significantly above the median among the 66 countries compared, and it ranked near the bottom of the list in the areas of *school-level entrepreneurship education, post-school entrepreneurship education, R&D transfer,* and *commercial and legal infrastructure*. On the whole, the GEM 2017 report stated of Saudi Arabia that "the entrepreneurial ecosystem is weak and has become weaker in several critical indicators" (p. 27).

Table 11: Saudi Arabia's ranking in GEM 12 main entrepreneurship framework conditions

Framework Condition	Saudi Rank
Financing for entrepreneurs	46
Government policies: support and relevance	39
Government policies: taxes and bureaucracy	31
Government entrepreneurship programs	52
Entrepreneurial education at school stage	60
Entrepreneurial education at post school stage	60
R&D transfer	58
Commercial and legal infrastructure	64
Internal market dynamics	32
Internal market burdens or entry regulations	46
Physical infrastructure	24
Cultural and social norms	34

Source: (la Vega et al., 2017)

Notably, the GEM report quotes Ghassan Al-Sulaiman, the Governor of the Saudi SMEs Authority (SMEA), which is responsible for enhancing the entrepreneurship and SME development ecosystem. According to him, the most important focus for the SMEA is to "facilitate access to funding and encourage financial institutions to allocate up to 20% of overall funding to SMEs" (la Vega et al., 2017, p. 11). The report also credits Alsulaiman with affirming his commitment to working, in collaboration with engaged stakeholders within the Kingdom, to review regulations with a view to removing obstacles to SMEs development and enabling entrepreneurs to market their products and services and to help them export to other markets globally, while also working to build more business incubators and accelerators and add new training programs and venture capital funds (la Vega et al., 2017).

3.3.2 The Status of Innovation Activities

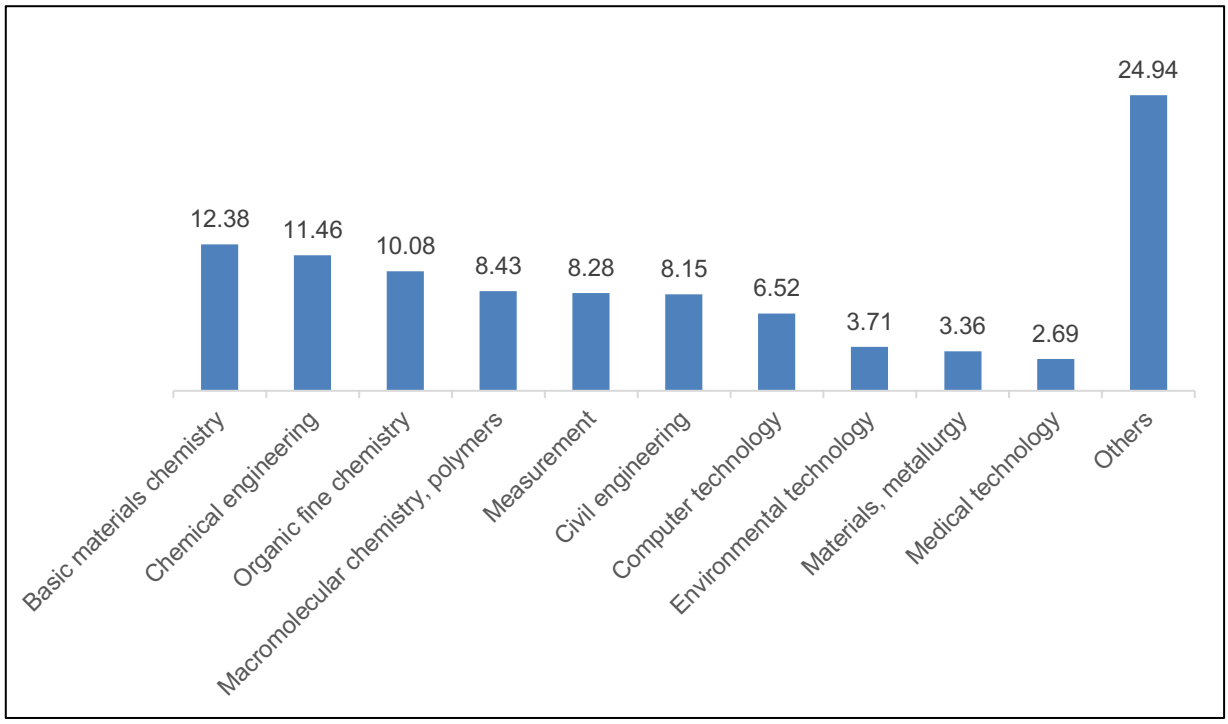
Nearly a decade ago, Alshumaimri and colleagues noted that a process of technology transfer had gained serious momentum in the Kingdom; the authors considered this a vital step in the transition from an oil-based to a knowledge-based economy, as well as to make the Saudi economy competitive globally (Alshumaimri, Aldridge, & Audretsch,

2010). More recently, Yusuf and Atassi (2016) stated that the nation's "mission to diversify its economy depends heavily on innovation and entrepreneurship" (p. 26). The Saudi government is aware of this fact, and for this reason the Intellectual Property (IP) laws in the Kingdom have been under review. Particular targets for advancement through regulatory revision and promotion of entrepreneurship include water technologies, biotechnology, advanced materials, nanotechnology, information technology, electronics, communication, oil and gas, petrochemicals technology, medical and health, space, energy, environment, agriculture, and construction (Alsodais, 2013). According to Youssef (2016), this is part of broader efforts aimed at "maximizing local production and developing the national economy according to the Saudi Vision 2030".

According to the latest data from the World Intellectual Property Organization (WIPO), [10] although Saudi Arabia has been a member of the WIPO since 1982, it only recently began to show noticeable progress in innovation and patents registration. As a key indicator, total Saudi IP filings were 197 in 2001, but jumped to 1108 cases in 2010 and further to 3538 in 2015. For patents, granted cases went from near zero in 2001 to 198 resident cases, 600 non-residents, and 798 abroad patents in 2015. Additionally, there was a jump in number of trademark applications and registrations from zero applications in 2001 to 7,482 resident trademarks, 11,149 non-resident trademarks, and 2,908 abroad cases in 2015. The same WIPO data, however, inform us that in 2015 Saudi Aramco applied for almost 43% of the total Saudis patents, while the Saudi Arabian Basic Industries Company (SABIC) applied for almost 29%; moreover, total patent applications for 2001-2015 show a high concentration in chemical applications (viz., the top four categories; see Figure 19).

[10] WIPO (http://www.wipo.int) is a self-funded United Nations organization. It was established in 1967 with headquarters in Genève, Switzerland. So far, there are 189 states as members. It acts as a global forum for intellectual property services, policy, information, and cooperation.

Figure 19: Saudi patent applications by field and percentage of national total, 2001-2015



Source: WIPO (http://www.wipo.int), 2017

These latter figures indicate that a narrow concentration of innovative business activity in terms of fields and participants has been and largely remains the norm in Saudi Arabia. In oil and gas technologies, Saudi Aramco is very active in supporting innovation. In the petrochemicals industry, SABIC, in collaboration with King Abdulaziz City for Science and Technology (KACST), is the key player (Alsodais, 2013). Among Saudi universities, most of the activity takes place under two big names: King Abdullah University of Science and Technology (KAUST) and King Fahd University of Petroleum and Minerals (KFUPM). KAUST is a research university with industry collaboration as a strategy. KAUST works with different entities within the private sector as well as with non-profit and governmental bodies for the purpose of transferring knowledge and technologies, which are created at the University, toward achieving mutual benefits through entrepreneurship and start-ups that add value to the Saudi economy (King Abdullah University of Science and Technology, 2017). KFUPM, for its part, ranked fourth globally in 2015 with 126 patents (Al-Sughair, 2016b). Despite this leadership, however, the rate of commercializing patents is still modest in the Kingdom. To overcome this challenge, KACST, in partnership with KAUST, KFUPM, Saudi Aramco, and Taqnia (the technology arm of the Saudi Public Investment Fund) formed the Research Products Development Company (RPD) in December 2014 (The Saudi Arabia Advanced Research Alliance (SAARA),

2016). The main function of RPD is to commercialize research output in the Kingdom – that is, to turn innovation into end products with economic impact. Its formation was also carried out in collaboration with RTI International (http://www.rti.org), an independent U.S. non-profit institute that provides research and related technical services to turn knowledge into business practice.

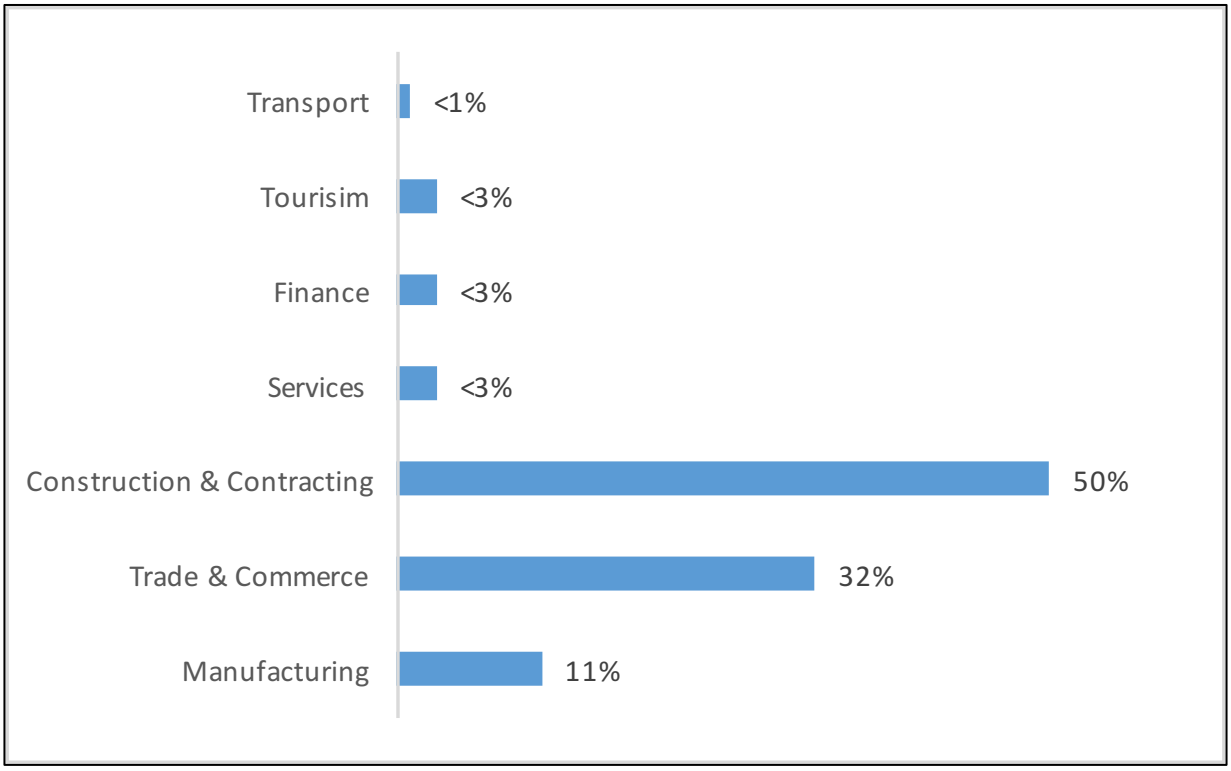
To conclude this section, Saudi Arabia is progressing in terms of strengthening innovation and improving the entrepreneurial environment, yet there remains wide latitude for further positive change, especially in the financing system, regulations, and education. For example, the International Monetary Fund (IMF) has called on the government of Saudi Arabia to enhance "the banking sector's collateral regime in order to boost lending to entrepreneurial businesses, which is extremely low by international standards" (Abu-Sharkh & AlShubaili, 2013, p. 8). Further, The GEM report emphasized that progress should consider "the quality of entrepreneurial activity, rather than the quantity" (la Vega et al., 2017, p. 58). Cognizant of these two needs, the Saudi government is expanding the dedicated fund for entrepreneurs, yet its "financial support schemes increasingly incorporate a training element, so that entrepreneurial ventures will be better placed to tap private sources of funding in future" (Abu-Sharkh & AlShubaili, 2013, p. 8). As noted, Saudi universities are already raising the flag of academic-industrial collaboration. Nonetheless, Yusuf and Atassi (2016) call on Saudi universities to establish proper partnerships with relevant stakeholders in entrepreneurship and SMEs development as they seek to commercialize innovations, as well as to collaborate with international educational and research institutes to assimilate best practices, and, finally, to consider working on developing human capital as well.

3.4 SMEs Current State and Contribution to GDP and Employment in Saudi Arabia

Per the Tarkiz Consultancy report that was submitted to Saudi Aramco in 2012, the entrepreneurship and SMEs sector in Saudi Arabia has not only recently become a respected source of innovation, providing new products and services, but has also started to show signs of creating significant numbers of jobs for Saudi citizens. In the manufacturing field, which is of strategic importance to the Kingdom, the SMEs sector has started to show its significance in supporting large manufacturers by feeding them supplemental and supportive products, such as parts and services, including maintenance for systems and equipment. According to the latest available figures, there

are 4,600 factories which are served by 500,000 SMEs across the Kingdom (Tarkiz, 2012, p. 6). The government of Saudi Arabia is supporting the efforts of these SMEs through agencies such as the Saudi Industrial Development Fund (SIDF), the Saudi Credit Bureau and the Saudi Industrial Property Authority (Tarkiz, 2012).

Figure 20: Shares of Saudi SMEs Market by Sector



Source: United Consulting Group, 2015

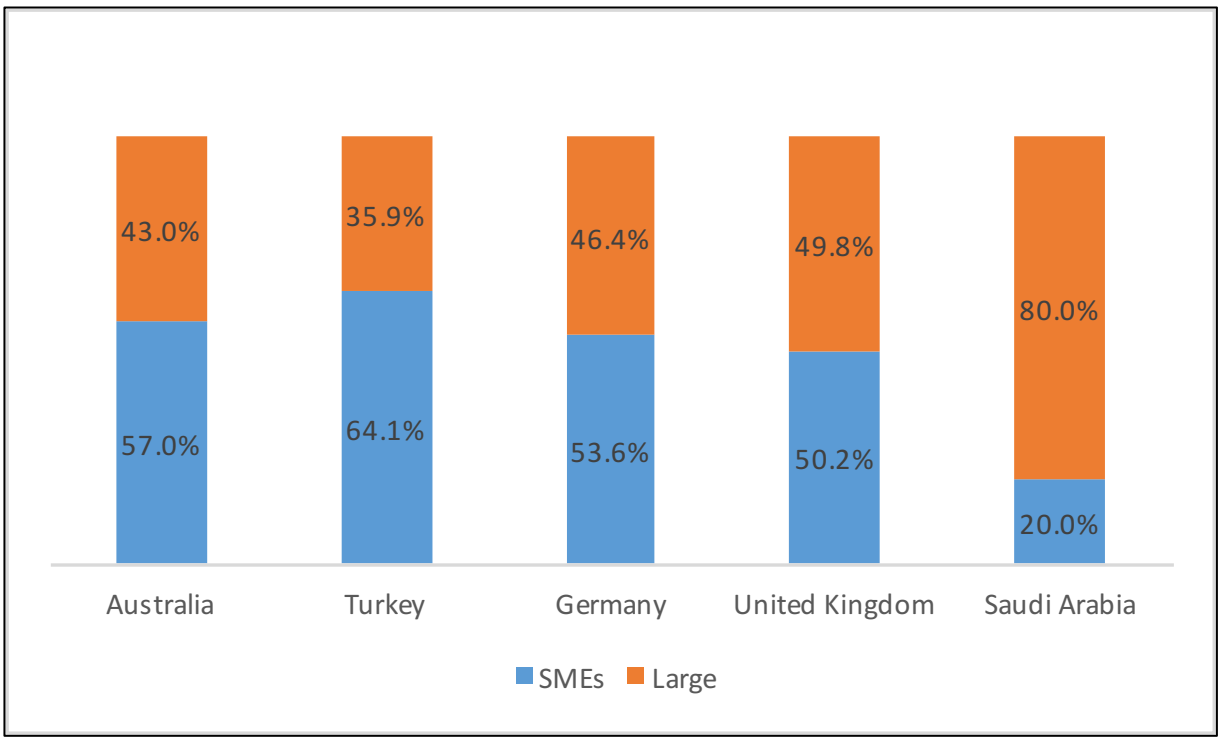
Saudi Arabia is an unusual case in that its market is considered the largest in the Middle East and yet it is still essentially an emerging market, particularly with respect to the underdevelopment of the SMEs sector. Specifically, according to the United Consulting Group, when “analyzing the trend in other countries with similar nature, SMEs should have contributed to around 45% of total GDP” in Saudi Arabia (United Consulting Group, 2015, p. 19). Nevertheless, SMEs represent almost 90% of the businesses in Saudi Arabia, with current investment in the SMEs sector around USD 70 billion; sole proprietorships constitute 85% of the total SMEs (Jeddah Chamber, 2016, p. 3). As Figure 20 shows, about 50% of SMEs in Saudi Arabia are in the construction and contracting sectors, consuming almost 60% of the loans provided to SMEs (Jeddah Chamber, 2016, p. 3). Trade and commerce follows, with a 32% share, while manufacturing accounts for only 11% (United Consulting Group, 2015, p. 3). As Ashoor

(2013) puts it, the sectoral structure of SMEs in Saudi Arabia is “skewed towards simple contracting and trading operations” (Ashoor, 2013, p. 27).

3.4.1 Contribution to the GDP

With respect to the contribution of entrepreneurship and SMEs to the Saudi GDP, the first important observation is that a review of seven assessment reports completed during the period 2008 to 2016 shows a wide variation in the findings. For instance, in 2008 Saudi Aramco reported that the SMEs contribution to the non-oil GDP was 28% (Booz&Co, 2008). Hertog (2010), writing for the EU-GCC forum, states that “We have little data about SMEs” contribution to the national GDP of Saudi Arabia (p. 15). In 2011, the Ministry of Labor put the contribution at 22% based on a comprehensive assessment conducted at that time (Boston Consulting Group, 2011). In 2012 Saudi Aramco reported that the SMEs contribution to the non-oil GDP was 25% (Tarkiz, 2012). In 2013, the Korea Development Program (KDI), in collaboration with King Fahd University of Petroleum and Minerals (KFUPM), assessed the contribution at 22% (Suh, Yim, Lee, & Chung, 2012). United Consulting Group (2015) put the figure at 33%. Most recently, in connection with the “Vision 2030” transformation plan, the Saudi Council of Economic Affairs and Development assessed SMEs contribution to GDP at 20% (Vision 2030, 2016b). However, it is not clear whether the latter statement refers to the whole GDP or only to the non-oil GDP. This distinction would make a significant difference, since the oil and gas sector constitutes 46% of the Saudi GDP. Nevertheless, for comparison purposes, Figure 21 interprets the 20% figure to refer to overall GDP, which is more likely, given the role of major players in oil and gas.

Figure 21: Proportional contribution to GDP of SMEs and large enterprises in Saudi Arabia and four comparator economies



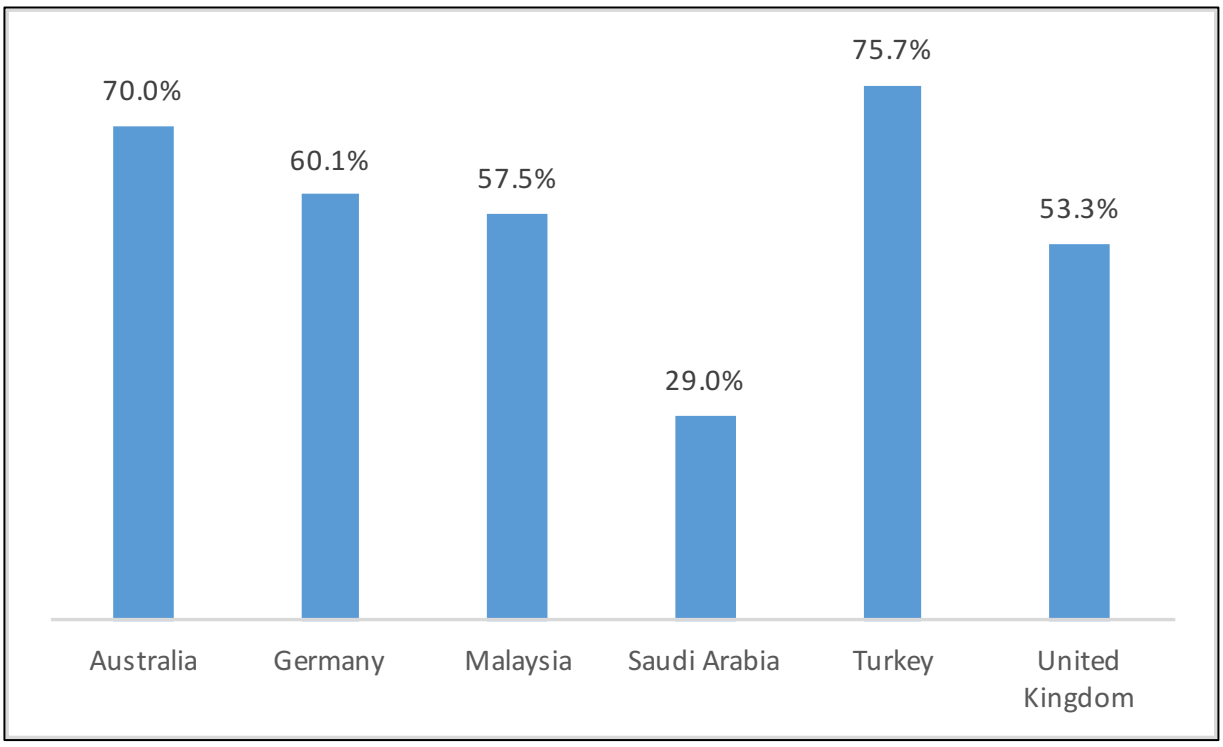
Source: United Consulting Group, 2015

Note: The Saudi figure is from the Vision 2030 Plan

3.4.2 Contribution to Employment

Flynn (2011) states that socioeconomic and demographic indicators suggest that the Saudi labour force will expand rapidly in the near future. Indeed, Prokop (2003) estimated that the working population of young Saudis will rise to over eight million by 2020. The role of the SMEs sector is critical in meeting this challenge. However, as Figure 22 shows, Saudi SMEs current contribution of 29% to total employment in the Kingdom is minimal compared to other economies with similar volume of SMEs within the private sector (United Consulting Group, 2015, p. 22). Moreover, a report prepared for the Saudi Ministry of Labor by a well-known and respected consulting firm also revealed that Saudi citizens account for only nine % of the total employment in the SMEs sector (Boston Consulting Group, 2011). For comparison, in OECD economies in which SMEs account for more than 95% of firms, 60 to 70% of employment opportunity is provided by this sector (OECD Observer, 2000).

Figure 22: SMEs Contribution to total employment in Saudi Arabia and five comparator economies (World Bank Data)



Source: United Consulting Group, 2015

3.5 Organizations and Programs that Support Financing and Training for Saudi Entrepreneurship and SMEs Development

As noted in section 3.3, the G20 Entrepreneurship Barometer report of 2013 evaluated the entrepreneurial environment based on five "pillars" or fundamental categories: entrepreneurship culture, access to funding, coordinated support, education and training, and tax and regulations. To understand the state of Saudi entrepreneurship with respect to most of these categories, it is vital to have information on the major organizations and programs that play a role in shaping these features of the business environment. However, filling this need is challenging with respect to Saudi Arabia because there is no central resource for information of this kind.

3.5.1 The Challenge of Data Collection

Indeed, Flynn (2011), who collected information for his study of the Saudi labour force from non-Saudi agencies due to the lack of structured databases in the Kingdom, suggested that "a uniform system of accounting for labor market activities could be a valuable technical tool" (p. 585). This and similar limitations on academic studies related

to Saudi Arabian business have been noted by many of the authors whose works are reviewed here (Abousaber, 2013; Alfaadhel, 2010; Aljarallah, 2010; Alshardan, 2016; Binzomah, 2008; Khan, 2013; Suh et al., 2012; Zafar, Almaleh, Alshahri, & Alqahtani, 2015).

As noted above, a new authority, the SMEA, was recently established to oversee matters impacting entrepreneurship and SMEs in the Kingdom; however, this authority has not yet stepped in to fill the informational void. For this reason, the present researcher based the following account on a literature review and on his own field survey of Saudi organizations and the roles that they play. Primary sources in this regard consist of materials issued by the organizations themselves, as well as the author's personal contacts in Saudi business and government. For secondary sources, the most important are the following: a 2011 *Saudi Journal of Economics* report on SMEs Development Centers (Ministry of Finance, 2011); a booklet developed by the Eastern Province Chamber of Commerce in 2010 (Chamber, 2010); a list provided by the Riyadh Chamber of Commerce in 2011;[11] the First Annual Guide to the Saudi Small Business Incubator Network (Badir, 2014); Khan's (2013) paper on the entrepreneurship ecosystem in Saudi Arabia; and information obtained from Internet postings, particularly on the King Abdulaziz City for Science and Technology website (https://www.kacst.edu.sa).

Other secondary sources include the assessment studies conducted by various consulting firms during the period 2008 to 2017 (see Table 12) and the ecosystem mapping recently carried out by the Saudi Aramco Entrepreneurship Center,[12] which is broadly considered to be the most comprehensive database. However, the author took steps to validate all collected information through private calls and personal contacts, to ensure, for example, that named individuals and entities existed and were identified correctly. Indeed, given the absence of an integrated source of information, relying on primary and secondary sources would otherwise put the researcher at risk of passing on incomplete or even misleading information – as in an example that the present author noted with respect to the Global Competitiveness Forum (2015) report on SMEs in Saudi Arabia, which did not mention the different financing vehicles available through Saudi Aramco (which, since 2011, has been the first and only entity in Saudi Arabia to provide entrepreneurs with non-collateral debt loans).

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[11] The researcher visited Riyadh Chambers of Commerce in May 2011 to collect a list personally, as it was neither published nor available electronically.

[12] The information is classified as non-restricted. The researcher is the General Advisor of the Center and has access to this information.

Table 12: Consultant-authored studies on Entrepreneurship and SMEs in Saudi Arabia

Consultant Name	From	Study Year	Ecosystem Assessment	Proposed Execution Plan	Client in Saudi Arabia
Booz&Co.	United States	2008	X	X	Saudi Arabian Oil Company (Saudi Aramco)
EU-GCC Forum	European Union	2010	X		GCC Chambers
Boston Consulting Group	United States	2011	X	X	Ministry of Labor
Tarkiz	Saudi Arabia	2012	X	X	Saudi Arabian Oil Company (Saudi Aramco)
Korea Development Institute	South Korea	2013	X		King Fahd University of Petroleum and Minerals (KFUPM)
United Consulting Group	Saudi Arabia	2015	X		Ministry of Commerce
McKinsey&Co.	United States	2016	X		Council of Economic Affairs and Development
Global Entrepreneurship Monitoring	United States	2017	X	X	Prince Mohammad Bin Salman College

3.5.2 Categorizing the Organizations

In 2008, the earliest of the above-referenced consultant studies generated the following list of critical shortcomings with respect to the state and potential for development of entrepreneurship and SMEs in Saudi Arabia: 1) insignificant level of entrepreneurial activity; 2) entrepreneurs receive patchy support services, with significant gaps; 3) sub-standard quality of services provided; 4) lack of institutional and industry links for services provided; and 5) lack of “end-to-end” coordinated support (Booz&Co, 2008). Although some of these considerations remain pertinent, efforts to foster and support entrepreneurship and SMEs development in Saudi Arabia can now be assessed as significant and as abounding in many forms, including programs instituted by governmental agencies, government-affiliated projects, private sector initiatives, and those operated by international bodies. The agencies and programs in question are now highly visible in the three major Saudi cities of Riyadh, Jeddah, and Dammam. In addition to providing and/or facilitating access to funding, the primary functions filled by these programs include entrepreneurial education and training, assistance in identifying and evaluating business opportunities, market assessments, feasibility studies, and formulating business plans (Jeddah Chamber, 2016, p. 3).

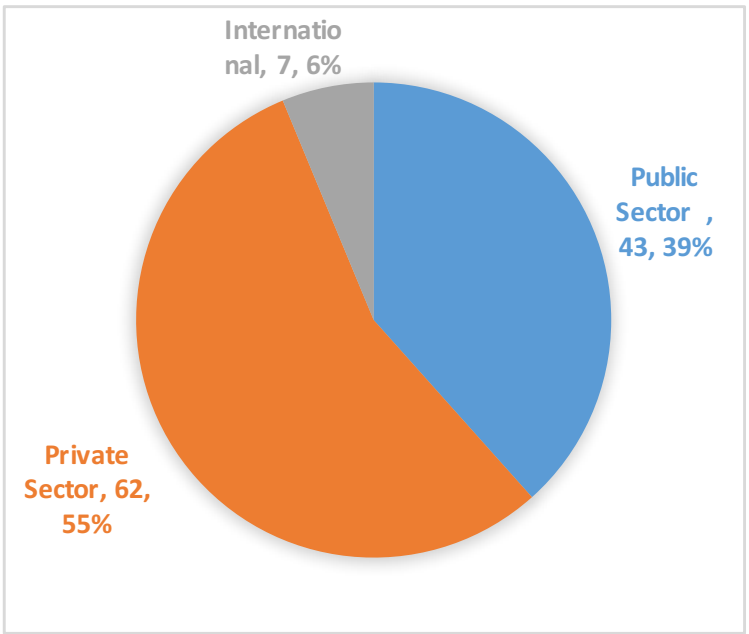
The establishment of organizations and programs designed to contribute to such areas of need began around 1999. Notable early participants included the private sector Saudi Entrepreneurship Development Institute (SEDI),[13] certain local banks operating with the endorsement of the Ministry of Finance’s Small and Medium Enterprises Financing

[13] SIDI was the first nation’s private sector entity to provide entrepreneurship and SMEs training.

Guarantee Program (KAFALA), King Abdulaziz City for Science and Technology (KACST) – through its incubator program (BADIR) – Abdulateef Jameel's Fund for Small Businesses (Bab Rizk Jameel), and the Centennial Fund (Booz&Co, 2008). SEDI operations in earnest in 2004, when it began providing training to potential entrepreneurs relying on a UNIDO training program, in collaboration with Jeddah Chamber (Arab News, 2004). In the same year, the first independent institute, the Centennial Fund (TCF), was formed by Royal Decree to provide both financial and non-financial support to entrepreneurs. Before the end of the decade, moreover, a small number of private investors, such as Malaz Capital and the Arab Business Angels Network, had begun to bravely enter the market and to invest in entrepreneurs and SMEs (Booz&Co, 2008).

During the period 2009 to 2016 the number and types of organizations in the field of support for entrepreneurship and SMEs development in Saudi Arabia burgeoned. Nevertheless, some participants also ceased operations, as programs of this kind, like business enterprises, have life cycles and factors that affect their longevity or relevance, such as market change, lack of funding, and so on (M. T. Hannan, Pólos, & Carroll, 2007). As of September 2017, in any case, according to the results of the field survey conducted by the present author, 112 relevant organizations could be identified in Saudi Arabia. Of these, 43 entities (39%) were operated by the public sector, 62 (55%) by the private sector, and seven (6%) by international organizations (see Figure 23).

Figure 23: Distribution of Entrepreneurship and SMEs development organizations in Saudi Arabia by sponsoring sector (Public, Private, International)



According to Isenberg (Isenberg, 2011), most of these organizations provide services in the areas of financing or human capital development. For present purposes, therefore, the programs are broken down and discussed according to the categories of “financial” and “non-financial” services. Table 13 shows the breakdown of 63 financial service programs identified in the Kingdom: 16 are public sector entities, 47 from the private sector. In the non-financial category, the 132 identified programs/services break down into 87 public sector, 35 private sector, and 10 operated by international bodies.

Table 13: Breakdown of Saudi financial and non-financial service programs for entrepreneurial and SMEs development available in Saudi Arabia as of September 2017

Sector	Financials	% to Financials	% to Sector	% to Total	Non-Financials	% to Non-Financials	% to Sector	% to Total	Total	% to Total
Public Sector	16	25%	16%	8%	87	66%	84%	45%	103	53%
Private Sector	47	75%	57%	24%	35	27%	43%	18%	82	42%
International	0	0%	0%	0%	10	8%	100%	5%	10	5%
Total	63	100%		32%	132	100%		68%	195	100%

As seen in Table 13, the private sector provides 75% of available financial services, compared to 25% from the public sector. This distribution is understandable when one bears in mind that most financing is provided in the form of interest-earning loans or equity investment. In other words, this category is dominated by the private sector because there is money to be made through the provision of such services. By contrast, the public sector dominates the service category in which money is essentially *spent on* (invested in) development, namely such non-financial services as education and training, together with other activities targeted at *developing* the entrepreneurship and SMEs ecosystem. Here, in the non-financial category, the public sector share of service provision is 66%, compared to 35% for the private sector and 8% for international agencies (see Table 13 and see further below).

3.5.2.1 Providers of Access to Financing

Table 14 shows the distribution of the 63 identified entrepreneurship/SMEs financing programs available in Saudi Arabia by sponsoring sector (public or private) and type of financing. As can be seen, the public sector sponsors six collateral debt loan, one non-collateral loan, one grant seed fund, seven venture capital (VC), and one investment

angel program. The private sector sponsors 20 collateral debt loan, 26 private equity (PE), and one angel investor financing program. The programs in question are identified and discussed by funding type following the table.

Table 14: Financial services / programs by type and sector as of September 2017

Sector	Financial					Total
	Collateral Loans	Non-Collateral Loans	Seed Fund (Grant)	PE / VC	Angel Investors Networks	
Public Sector	6	1	1	7	1	16
Private Sector	20			26	1	47
Regional/ Int'l						0
Total	26	1	1	33	2	63

3.5.2.1.1 Collateral Debt Loan Programs

Table 15 identifies the 63 programs that, per the author's recent survey, currently provide financing to Saudi entrepreneurs and SMEs. As noted, all but one of the identified financing programs that operate through debt loans are collateral based. The collateral debt loan programs include six that are sponsored entirely by the public sector. Of private sector programs in this sub-category, 11 operate through banks that are incentivized to finance entrepreneurs through a government grantor program called KAFALAH; the other nine are purely private. These programs are discussed following the table.

The Agricultural Development Fund

According to the Agricultural Development Fund (ADF) website (http:// www.adf.gov.sa), the fund was established by Royal Decree in 1963 under the name Saudi Arabia Agricultural Development Bank. In 2009, the name was changed to Agricultural Development Fund and the focus shifted to financing SMEs.

The purpose of the fund is to provide financial support for the development of various types of agricultural activity across the Kingdom. Projects initiated by farmers – and, more recently, by entrepreneurs in the agricultural sector – are supported through interest free loans with long grace periods to help them sustain their projects and increase efficiency by improving equipment, materials, and/or technical methods. The fund typically provides asset capital rather than working capital. In other words, the loans are earmarked for the

purchase and maintenance of livestock, materials, and equipment used in animal and agricultural husbandry and for the production of its by-products, not for marketing expenses or other costs associated with developing a business in this sector.

In light of the shift to include entrepreneurial activity in the agriculture sector, however, the government's investment in the ADF was increased from SAR 2 Billion (USD 0.5 Billion[14]) to SAR 20 Billion (USD 5.3 Billion). Loans to individual recipients vary from SAR 200,000 to SAR 20 Million. In 2013, the most recent year for which data are available, loans from the fund totalled SAR 31 Billion (USD 8 Billion), with a low default ratio of 17.5% (Arriyadh Development Authority, 2014). Most of these loans were made for activities in the following six areas, on which the ADF focuses its support and development efforts: (1) water use efficiency, (2) agricultural products distribution channels and marketing, (3) palm tree production, (4) fishing production, (5) red meat production, and (6) white meat production.

[14] Based on a fixed exchange rate of USD 1 = SAR 3.75.

Table 15: Financing access programs for Saudi entrepreneurs and SMEs as of September 2017

Sector	Collateral Debt Loans	Non-Collateral Debt Loans	Seed Fund (Grant)	Private Equity / Venture Capital	Angel Investors Networks
Public Sector	1. Agricultural Development Fund 2. National Entrepreneurship Institut (RIYADAH) 3. Prince Sultan Fund 4. Saudi Development Bank 5. Saudi Industrial Development Fur 6. The Centennial Fund	1. Saudi Aramco Entrepreneurship Center	1. Saudi Aramco Entrepreneurship Cent	1. King Abdullah Economic Cit (KAEC) 2. King Abdullah University for Science and Technology 3. Ministry of Commerce & Investment (Fund of Funds) 4. Misk Fund 5. Saudi Aramco Ventures 6. Saudi Aramco Energy Venti 7. Taqnia	1. Sirb Network
Private Sector	1. AHZ Community Service Center 2. Arab National Bank (KAFALA) 3. Ajil Financial Services Company 4. Alamthal Financing 5. Alraedah Finance 6. Alrajhi Bank (KAFALA) 7. Alyusr Leasing and Finance 8. Bank Albilad (KAFALA) 9. Bank Aljazira (KAFALA) 10. Bab Rizq Jameel 11. Banque Saudi Fransi (KAFALA) 12. Deem Almanahil 13. Nayfat Financing Company 14. National Commercial Bank (KAFALA) 15. Riyad Bank (KAFALA) 16. SABB (KAFALA) 17. SAMBA (KAFALA) 18. Saudi Investment Bank (KAFALA) 19. Saudi Hollandi Bank (KAFALA) 20. Saudi Orix				1. 500 2. Base Ventures 3. BlueVine Ventures 4. MBC Ventures 5. Abraaj Group 6. Alkhabeer Capital 7. Allure Hub 8. Amwal Alkhaleej 9. BECO Capital 10. F.A.R. Venture 11. Global Investment House 12. iMENA 13. Itqan Capital 14. Jadwa Investment 15. Legend's Mist Investment 16. Malaz Capital 17. MISC 18. Mobily Ventures 19. N2V 20. Qotuf Flat 6 Lab 21. Ra'ed Ventures 22. Raz Group 23. ReAya Holding 24. SABIC Ventures 25. Saudi Brothers 26. Saudi Venture Capital 27. SEDCO Capital 28. Sidra Capital 29. Siraj Capital 30. STC Ventures	1. Oqal Network

The National Entrepreneurship Institute (RIYADAH)

According to its website,[15] the National Entrepreneurship Institute (RIYADAH) is a non-profit organization that was initiated jointly in 2005 by the Vocational Training Institute and the Ministry of Petroleum and Natural Resources. However, several other organizations became involved in founding Riyadah. From the government side, the Saudi Credit and Saving Bank (SC&SB) and the fully government-owned Saudi Aramco

[15] http://www.riyadah.com.sa/

played important roles. Private sector participants were SABIC, the Saudi Telecom Company (STC), and Alinma Bank.

Table 16: Riyadah: number of projects funded, durability, defaults, and default ratio, 2005-2016

Year	Funded	In Business in the same year of funding	Defaults	Default Ratio
2005	0	2	0	0%
2006	11	4	3	27%
2007	113	14	2	2%
2008	234	164	30	13%
2009	575	293	49	9%
2010	536	343	47	9%
2011	1087	596	72	7%
2012	1381	665	77	6%
2013	1778	1311	253	14%
2014	2154	1300	182	8%
2015	2596	1291	75	3%
2016	3518	1079	8	0%
Total	13983	7062	798	

Source: Riyadah Website, 2016 (http://www.riyadah.com.sa/)

Working out of nine offices around the Kingdom (https://www.riyadah.com.sa), Riyadah provides collateral debt loans to entrepreneurs up to a maximum of SAR 300,000 (USD 80,000). However, in the case of graduate degree holders who want to develop ventures in their field of specialty, Riyadah can increase the ceiling to SAR 500,000 (USD 133,333). All loans are interest free, and only a fixed loan management fee is deducted from the loan. The number of loans made by the organization has grown rapidly since its institution in 2005 (see Table 16). In the opinion of the present author, the rapid growth and current high volume of loans can be ascribed to the fact that Riyadah deals mostly with business ventures in traditional areas such as retail and construction, rather than with more complex or unusual ventures involving advanced or highly specialized technology – as seems clear from the selection criteria listed on the organization's website.

Prince Sultan Fund

In September 2007 the Prince Sultan Fund for Women's Development (PSF) was initiated as a non-profit agency to support Saudi women entrepreneurs – for whom it acts as a platform from which to launch their ideas into start-ups – and to build leadership skills among young Saudi women. Similarly to TCF (see below) and Riyadah, the government's rationale in sponsoring such an initiative is that it helps young Saudis to become self-employed and to create jobs for others. At SAR 300,000 the PSF funding ceiling is relatively modest. Nevertheless, the micro-businesses that it typically funds do create jobs for Saudi women, who are generally underserved by the broader job market – partly because Saudi social conventions often obviate opportunities for them to work in businesses that are not either run by women, provide products or services to women, or both. Indeed, in light of the number of projects funded by the PSF and the total funding level, Table 17, which shows annual figures for 2008-2011, demonstrates what the present author considers an impressive number of jobs created. Significantly, too, this figure increased consistently across the period for which data are available, even when projects and total funding contracted.

Table 17: Prince Sultan Fund: projects funded, total funding, and jobs created, 2008-2011

Year	Number of projects	Total fund (SAR million)	Jobs created
2008	17	2.9	58
2009	10	1.6	95
2010	4	0.7	114
1011	10	2.9	152

Source: Adapted from the PSF Annual Report 2012 (http:// http://www.psfw.org/)

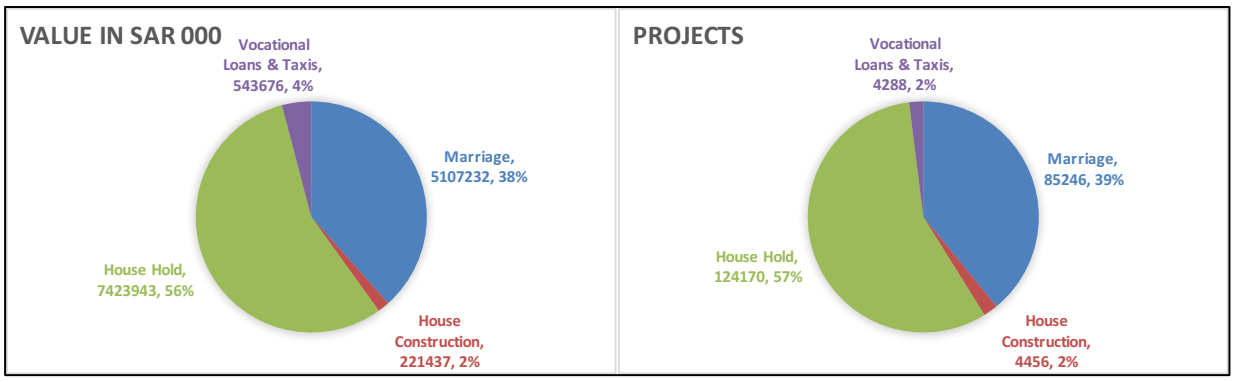
These modest numbers, moreover, should also be considered important due to the fact that women's employment and, especially, entrepreneurship have only recently begun to receive significant attention – including government support – in Saudi Arabia. The novelty of such attention is among the reasons Saudi women entrepreneurs have been said to suffer from both a "lack of business expertise and lack of capita" (Sivakumar & Sarkar, 2012, p. 25). Yet it is also the case that women entrepreneurs face challenges such as discrimination in many countries (Minkus-McKenna, 2009). Special challenges that pertain to this group in Saudi Arabia include some of the aforementioned socio-cultural factors, which limit women's scope of activity (Sivakumar & Sarkar, 2012). Nonetheless, the call to develop women's entrepreneurship in the Kingdom continues to

expand (Sadi, 2010), and the progress of Saudi women entrepreneurs has been assessed as astonishing and ongoing (Yousuf Danish & Lawton Smith, 2012). Indeed, a recent study found that nearly 63% of Saudi women were operating "unregistered yet successful businesses", which they conduct largely by means of mobile phones and personal computers (Aziz, 2015).

The Saudi Development Bank

The Saudi Development Bank (SDB), previously named the Saudi Credit and Saving Bank (SC&SB), is among the best-known entities in Saudi Arabia in the field of small business financing. SDB is a public banking body that was established by Royal Decree in 1971 to provide interest-free loans as a form of social safety net and to promote family life in the Kingdom. Specifically, the primary and original purpose of loans made by this body – which top out at SAR 50,000 (USD 13,333) is to help low-income individuals marry, support their families, and maintain homes. In 2007, the mandate of SC&SB was expanded to include professional ("vocational") loans to entrepreneurs and independent contractors (e.g., taxi operators). On 3 September 2012, the bank actually began issuing such loans (Arab News, 2012a). However, as Figure 24 shows, at 4% in the latest year for which data are available from the Saudi General Authority for Statistics, loans of this type remain a small portion of the overall lending activity of the SDB. (Share of total bank disbursement in previous years, according to the same source, was as follows: 2012: 5%; 2013: 8%; 2014: 3%.).

Figure 24: Distribution of Saudi Development bank loans by category, as percentage of total value lent and as share of total projects funded, 2015



Source: General Authority for Statistics, 2016 (http://www.cdsi.gov.sa/)

Although represented on Figure 24 as “Vocational Loans and Taxis”, SDB actually provides business financing under two differently-named rubrics: Masarat loans, which are open to all, and Fresh Graduate loans, which are earmarked for prospective entrepreneurs with university degrees. Under the Masarat program, the bank finances, in principal, all types of venture ideas, at both start-up and growth stages. However, priority is given to unique ideas that are considered to have a competitive advantage, as well as to projects that can be established in remote areas of the Kingdom, particularly when these involve production. Funding starts with 100% financing for projects valued at up to SAR 300,000 (USD 80,000) and reduces to 50% for projects up to a ceiling of SAR 8 million (USD 2.13 million) in value. By contrast, Fresh Graduate loans are dedicated to applicants with university degrees who are considered subject matter experts in technical fields. The available funding levels are the same as in the Masarat category, but Fresh Graduate loan applications receive priority because many represent ventures in areas in which the market is underserved, such as professional services in health care and education.[16]

The Saudi Industrial Development Fund

The Saudi Industrial Development Fund (SIDF) is widely considered to be the most important fund involved in assisting the development of the Saudi industrial sector. SIDF was established in 1974 with “a mandate to finance, and support the development of the private industrial sector by providing medium and long-term loans for the setting up of new factories [and for the] expansion, upgrade and modernization of the existing ones” (Saudi Industrial Development Fund, 2016). SIDF grants collateral debt loans for up to 50% of a project’s cost, to a maximum of SAR 50 million per project. It provides the borrower with a grace period of 18 months and with the facility to pay back the loan over a five- or ten-year period. SIDF does not charge interest, but it does take a 2.5% administrative fee. In additional to financial support, SIDF provides clients with consulting services, mainly in the administrative, technical, financial, and marketing fields (Ministry of Commerce and Investment, 2016).

SIDF funds all types and scales of projects. However, its most recent available annual report (2015; 2016), which provides 2014 data, shows a concentration of funding in the following areas: (1) Engineering, (2) Chemicals, (3) Building Materials, and (4) Consumer

[16] Information is from the Saudi Credit and Saving Bank website (http://www.scsb.gov.sa/) as of September 2016. The bank is known, now, by the name “Social Development Bank”.

Industries. Of the 46 newly-funded projects begun in 2014, the agency identifies only four that lie outside these categories: three in the category designated as “Other Industries” and one in Cement (see Table 18). In addition to number, distribution, and funding level for projects, SIDF also tracks and reports projected job creation figures, which are particularly important given the challenges facing employment in Saudi Arabia. Per the 2014 report, projects begun that year were projected to create a total of 6,599 jobs (see Table 18).

Table 18: Distribution by industry and projected job-creation figures for SIDF-funded projects, 2014

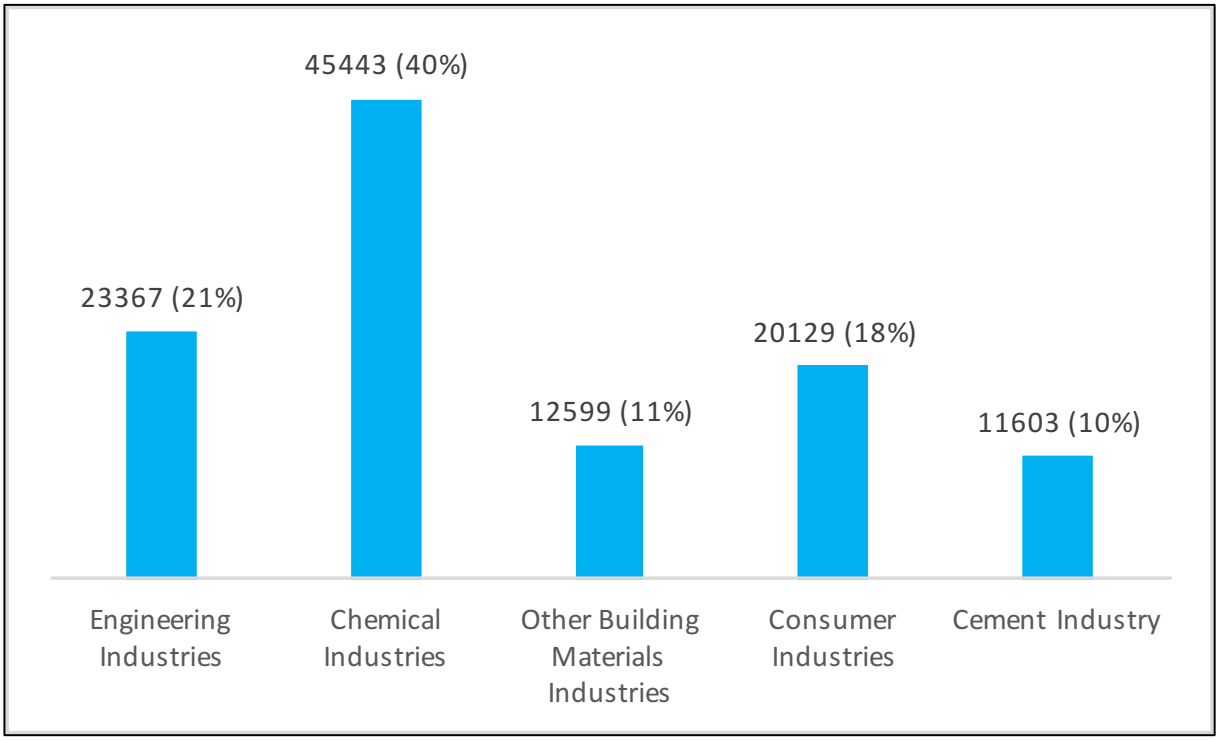
Sector	Number of Projects Start Production	Projected Number of Manpow
Engineering Industries	12	3217
Chemical Industries	12	1291
Other Building Materials Industries	9	1059
Consumer Industries	9	880
Other Industries	3	127
Cement Industry	1	24
Total	**46**	**6599**

Source: SIDF Annual Report, 2014 (Saudi Industrial Development Fund, 2015)

In terms of the breakdown of SIDF loan values extended to these industrial sectors, Figure 25, which omits the unidentified “Other Industries”, shows a clear emphasis on the “Chemical” side, to which over SAR 45 billion (USD 12 billion) was lent. What is also clear from these data, however, is a shift away from SIDF’s previous practice of funding large-scale projects almost exclusively. Specifically, the report states that 58% of approved SIDF loans for 2014 went to SMEs, with an average loan value of SAR 15 million per project[17] (Saudi Industrial Development Fund, 2016). This change exemplifies the recent and ongoing shift among major players in the Saudi economy toward greater recognition of the important role of entrepreneurship and SMEs.

[17] Researcher did not have access to previous figures for comparison.

Figure 25: Total cumulative value of SIDF approved loans for 2014 in millions of Saudi Riyals



The Centennial Fund

The Centennial Fund (TCF) is an independent, non-profit foundation that, per the organization's website (http://www.tcf.org.sa), was established by Royal Decree in 2004. As such, it is the oldest public sector entity dedicated to supporting and assisting youth entrepreneurship in the Kingdom. Modelled on the United Kingdom's Youth Business International (YBI) program, the success of which has spread to 40 countries, TCF focuses on social entrepreneurship venture ideas and provides funding and training to help young Saudis become self-employed, create jobs for others, and contribute to the local economy by growing the SMEs sector.

As of 2013, TCF had provided loans totalling USD 190.5 million to fund 2,238 youth entrepreneurship projects, leading to the creation of some 5,400 jobs (Almunajjed, 2013). Of projects funded, 79% of the applicants were male, 21% female. The historical default ratio is 17%, and 65% of the funds lent are supplied by the Saudi Credit and Savings Bank; the rest are generated by TCF's own fundraising efforts (http://www.tcf.org.sa).

Al-Zamil Group Community Services Center

According to Burton (2016), Al-Zamil Group (AHZ) is an 85-year-old family owned business. At a cost of USD 13 million, AHZ established its Community Services Center in 2008 to help Saudi youth become independent and productive, "so that they can fulfil

their economic ambitions and meet their social obligations" (http://www.zamil.com/ahz-community-service-center.html). Programs operated by the AHZ Center include the Program for the Support of Small Projects. This program provides interest free loans (SAR 100,000) for new Saudi graduates, regardless of gender, to establish small industrial and commercial service ventures.

Bab Rizq Jameel

Bab Rizq Jameel (BRJ) is one of several initiatives operated under the rubric of Abdul Latif Jameel Community Service Programs, in turn a project of the Abdullatif Jameel Group, which is the sole agent of Toyota in Saudi Arabia. BRJ is also one of the highest profile Saudi programs involved in fostering self-employment and/or SMEs development. Started in 2003, the original and primary function of BRJ is to help young Saudi men become self-employed and financially independent through taxi cab ownership. BRJ provides successful applicants with training and loans for this purpose. In addition, BRJ has evolved to provide micro-finance collateral loans to entrepreneurs seeking to establish new businesses. These loans are interest-free and range from SR 6,500 (USD 1,733) to SR 200,000 (USD 53,333). The repayment period can extend up to five years. So far, according to the program's website, BRJ has supported the establishment of 25,000 micro-financed SMEs (https://www.babrizqjameel.com). Types of enterprise supported have included "confectionery production, photography studio, fast food, medical equipment, football field, bricks factory, beauty salon, and other several projects" (Arab News, 2012b).

Deem Almanahil

Recently, the role of Saudi businesswomen has become much more prominent and visible than in the past. A major milestone in this evolution occurred in 2011, when a number of prominent Saudi women established a new fund through their company, Al-Manahil. Founders included Princess Madawi bint Musaad, Princess Latifa bint Musaad, Princess Reema bint Sultan, Awatis Balghonain, Munaira Al-Rashid Al-Humaid, and Pansa Al-Rashid Al-Humaid (Estimo, 2014). Operating as a non-profit under the name Princess Madawi bint Musaid bin Abdulaziz Fund, the program aims to help Saudi woman "practice free work and own...small projects in Riyadh" (http://deem-almanahil.org). According to the fund's website, the program helps enable Saudi woman to achieve this goal by providing them with an integrated set of services that includes training, technical support, and financing. Deem Almanahil, as the program is known,

provides collateral interest-free debt loans of up to SAR 300,000 (USD 80,000). The payback period is up to five years (Estimo, 2014).

Local Banks Operating under the KAFALAH Program

Local banks in Saudi Arabia provide private customers with a range of financial services, including debt loans. When they provide loans to entrepreneurs seeking to develop SMEs, they do so under a guarantee program known as KAFALAH. Operated by the Ministry of Finance through the SIDF, which started in 2006, KAFALAH guarantees up to 80% of any loan provided by a local bank to an entrepreneur.

Local Banks operating under the auspices of KAFALAH are the most active financiers of entrepreneurs and SMEs in Saudi Arabia. Under this program, banks provide collateral debt loans to entrepreneurs of up to SAR 2 million (about USD 533,000). All such loans require approval from KAFALAH management. In 2012, KAFALAH approved 1,670 guarantees with a total value of SAR 949 million (USD 253 million). In 2013, the number increased to 2,515 guarantees with a total value of SAR 1,286 million (USD 343 million). Most of the increase went to the construction/building and contracting sector, which accounted for 58% of the total loans. The commercial sector came in second with 15%, followed by the industrial sector (10%) and the finance and business sector (8%). The remaining 9% of loan guarantees went to other business sectors, such as public and individual social services, transportation, storage and cooling, electricity, gas and water, mining and petroleum, and agriculture and fisheries. Notably, from the program's inception through the end of fiscal year 2013, liquidated guarantees accounted for less than 1% of total cases (SIDF, 2016).

As of the end of fiscal year 2014, KAFALAH had issued a total of 10,792 guarantees for loans to 5,549 SMEs, totalling SAR 5,277,721 million in guarantee value against total approved financing of SAR 10,647,812 million (Saudi Industrial Development Fund, 2015). In addition to facilitating higher volume of lending, the KAFALAH program is also widely perceived as having had a positive impact on the evolution of lending policies and procedures among participating banks. Local institutions have also begun to compete with each other for share of this market, including actively marketing and promoting KALAFAH within the entrepreneurial and SMEs community. Table 19 shows the total value of KALAFAH loans and loan guarantees, 2006-2014, as well as the distribution of share of this market across 11 local Saudi banks.

Table 19: KAFALAH loans and loan guarantees, by issuing bank, 2006-2014

Bank Name	Number of Gurantees	Value of Gurantees (SAR 000)	Value of Finance (SAR 000)	Number of Beneficiary Enterprises
National Commercial Bank	4,269	1,510,681	3,047,291	1,616
Riyad Bank	2,288	1,332,905	2,766,751	1,550
Alrajhi Bank	1,247	680,745	1,207,061	742
Arab National Bank	1,245	544,546	1,534,677	482
SAMA Financial Group	428	201,702	379,455	221
Saudi Hollandi Bank	400	390,753	576,465	331
Bank Aljazira	375	203,398	285,969	165
Bank Albilad	228	151,575	309,817	157
Saudi Investment Bank	20	77,561	149,740	64
Saudi British Bank	170	101,037	194,405	135
Saudi French Bank	122	82,818	196,181	86
Total	**10,792**	**5,277,721**	**10,647,812**	**5,549**

Source: Adapted from the SIDF Annual Report, 2014 (Saudi Industrial Development Fund, 2015)

Instalments and Leasing Services

Instalments and leasing services refers to an alternative financial support model that appeared recently in the Saudi market. There are five companies that provide this type of tailored financial services with a focus on the SMEs sector. Licensed to operate in Saudi Arabia by the Saudi Arabian Monetary Agency (SAMA), they are as follows: Alamthal for Finance Company, Alraedah Finance, Ajil Financial Services, Alyusr, and Saudi Orix. These companies focus on the following areas: Healthcare and Clinics, Food and Beverage, Contracting and Construction, Transportation, Travel and Tourism, Real Estate and Property Management, Agriculture, Pharmaceuticals, Education, Retail, Car Rental, Recreation and Entertainment, and Technology, Infrastructure, and Hardware.

Alamthal for Finance Company (http://www.alamthal.com.sa) is a Saudi limited company that was established in 2000. It provides tailored leasing financial solutions to SMEs under which movable and non-movable assets leased cannot be seen in the clients' balance sheets. Alamthal is considered to be the best choice for SMEs that need to lease equipment only for isolated projects. With assets totalling SAR 326 Million (USD 87 Million), Alamthal focuses on leasing vehicles, furniture and office equipment, computers and software, and heavy equipment. According to the latest available internal report, almost 80% of Alamthal's business is conducted with corporate customers, slightly less than 20% with SMEs (PWC, 2016).

Saudi ORIX was the second company to appear in Saudi Arabia within this niche. Established in January 2001 with a foreign investment license that classifies it as a non-

bank financial institution, it is the leading provider of lease financing in Saudi Arabia. Its mandate is to provide medium term asset financing with a focus on the SMEs layer within the private sector (Saudi Orix, 2016). Stakeholders in Saudi Orix are as follows: Saudi Investment Bank (38% equity), Trade Development and Investment Group (32%), Orix Corporation of Japan (27.5%), and Orix Leasing of Pakistan (2.5%). Leased facilities include machinery, construction equipment, transportation assets, stevedoring equipment, hospital equipment (health centres), and commercial real estate. Saudi Orix operates across Saudi Arabia and focuses on SMEs in specific business sectors, such as construction and contracting, health care, tourism, manufacturing, and trading. Saudi Orix emphasizes long-term relationships with both clients and suppliers, a strategy that may have contributed to its 48% compound growth rate and high return on equity, which has remained on average at 20% over the last four years (Saudi Orix, 2016).

Alyusr, which now has capital assets of SAR 500 Million (USD 133 Million), (http:/www.alyusr.com), was established in 2004. Its main function, according to its commercial registration, is to provide Shari'ah compliant leasing and financing solutions, exclusively to SMEs (Associated Accountants, 2015). Alyusr provides instalments and leasing financial services, primarily for automobiles but also in general.

Alraedah Finance is a closed joint stock company that began financing entrepreneurs with capital of SAR 50 Million in 2011. By 2015, the company had increased its capital to SAR 150 Million and had added five new branches to enable it to provide services across Saudi Arabia. According to the company's website, it provides Islamic funding solutions tailored to the needs of Saudi SMEs, primarily in three categories. The first is the "Fast Fund", which enables SMEs to access collateral loans up to SAR 500,000 that have to be paid back over a period of 18 months. The second solution is the "Equipment Lease", which is for leasing general assets up to a total value of SAR 5 Million, which can be paid off over a period of three years. The third option is the "Real Estate" fund, which allows SMEs to obtain collateral loans of up to SAR 7.5 Million for the purchase of property. These loans can be paid back over a period of three years (http://www.alraedah.finance).

Ajil Financial Services was officially established in 2014. Shareholders include Riyad Bank, MC Netherland Leasing and Financing Company, Mitsubishi UFJ Lease and Finance Company, as well as four entities from the Saudi private sector. According to its website, Ajil provides instalments and leasing financial solutions for capital assets. SMEs dealing with Ajil can list this capital equipment in their balance sheets (http:/www.ajil.com.sa).

3.5.2.1.2 Non-Collateral Debt Loans: The Wa'ed Loan Program

According to the present author's field research, there is only one organization in Saudi Arabia that provides non-collateral debt loans to entrepreneurs: The Saudi Aramco Entrepreneurship Center, through its Wa'ed Loan Program (Wa'ed). In 2008, Wa'ed conducted an assessment and determined that there was a significant need for loans to Saudi entrepreneurs with potential high growth businesses that lacked collateral. Thus, Wa'ed came up with a program to provide non-collateral loans of up to SAR 5 Million (USD 1.3 Million). The grace period varies between one and two years, depending on the nature of the project and the challenges that the entrepreneur may face – which, particularly in the industrial field, can include government regulations and difficult construction conditions. Since its foundation in 2011, Wa'ed has provided loans totalling SAR 288 Million (USD 77 Million) to 78 entrepreneurs; these funded ventures are ultimately expected to provide about 3,000 jobs (Al-Khursani, 2016).

3.5.2.1.3 Seed Funding (Grants)

Seed funding is not only practical in helping entrepreneurs to get through early stages of development – such as building prototypes – its presence has also been linked to higher long-term return on investment (Wong, 2002). Unfortunately, seed funding is not yet capitalized in Saudi Arabia. However, this void may soon be at least partially filled.[18] Saudi Aramco Entrepreneurship Center (Wa'ed) is poised to propose a plan to establish a fund to provide seed grants of up to SAR 100,000 (USD 26,667) through its Wa'ed Startup Lab incubator. The Lab will not acquire equity in funded ventures. Nor will grants be given as cash to the entrepreneur. Rather, funds will be made available for his or her use, under supervision, to acquire materials or services needed during the venture's proof-of-concept stage.

3.5.2.1.4 Private Equity / Venture Capital Entities

Another financial service area that focuses on the start-up phase is venture capital. Indeed, as Zider (1998) notes, venture capital is "not long-term money". Nonetheless, it plays a vital role in that it can be accessible "to firms that might otherwise have difficulty attracting financing. These firms are typically small and young, [and often] plagued by

[18] The information reported here was obtained in a private meeting with Ibrahim Al-Hussain, Wa'ed Startup Lab Manager, on October 12th, 2016.

high levels of uncertainty and large differences between what entrepreneurs and investors know" (Gompers & Lerner, p. 145).

The process of conceiving and developing a private equity and venture capital (PE/VC) industry that focuses on investing in SMEs in the MENA region began in Bahrain in 2005 (MENA Private Equity Association, 2016). Since that meeting of farsighted business people, PE/VC activity in the region has grown substantially – from near zero in 2005 to 175 transactions in 2015, with the majority occurring in Saudi Arabia and The United Arab Emirates (MENA Private Equity Association). Indeed, the market in the GCC is becoming increasingly attractive to international investors. According to Christidis (2016), Saudi Arabia is the fastest growing market, and e-commerce is a particularly fast-growing sector in the MENA region, estimated to be worth about USD 10 Billion Digital media is another rapidly expanding field, mainly in the UAE and Saudi Arabia, with a growth rate of 35% annually in recent years (Christidis). Even acquisitions have begun to appear in the GCC – again, especially in the UAE and Saudi Arabia. For instance, shaheya.com was acquired by a Japanese firm called Coockmap, which was recently valued at USD 1 Billion and which paid USD 14 Million to acquire shaheya. A French investor recently acquired another MENA tech business, "diwanee.com", for USD 12 Million (Christidis).

Although the PE/VC industry in Saudi Arabia is nascent, at least one authoritative source believes that it has "a sizeable potential as there are many strengths in the ecosystem and current innovation [and because] relevant rankings and statistics imply that innovation will grow in the Kingdom" (Reuters, 2015). This perspective finds support as certain private companies and foreign venture capital firms are eager to enter the Saudi market due to the potential attractiveness of Saudi SMEs. The focus of this interest resides currently with two main categories of industry: energy and clean technology (ECT) and information and communications technology (ICT).[19] ECT includes oil and gas, water technologies, power generation, renewables, advanced materials, eco-construction, Nano-technology, and petrochemicals. The ICT category includes hardware and services, robotics, "Internet of things", optoelectronics, digital health, financial technologies, virtual reality, wearables, innovative marketplaces, and social networks.

The PE/VC industry is governed and monitored by the Saudi Arabian Capital Market Authority, which was established by Royal Decree in 2003 (Capital Market Authority,

[19] This view was broadly expressed during the Arabian Venture Forum that was hosted by KAUST in November 2016, which the present author attended.

2016). PE/VC entities are increasing in number and are expected to increase their participation in providing support for SMEs that are seeking growth and expansion. Information on these entities and their niche industries and/or phases (idea generation, start-up, ramp-up, etc.) is somewhat sporadic. However, the remainder of this sub-section summarizes what the author was able to learn through field research, with the entities divided into two categories: public and private sector.

Table 20 summarizes, alphabetically, information on the seven public sector PE/VC entities operating in Saudi Arabia. Per Ashri (2016), the SAR 10 Million King Abdullah Economic City (KAEC) fund will be a dedicated VC seed fund for entrepreneurs operating within the existing KAEC accelerator. However, the fund has not yet been tapped into. The Innovation Fund established by King Abdullah University for Science and Technology (KAUST) is a VC entity that provides seed funding for new projects of up to USD 200,000 in exchange for minority equity, as well as early stage funding of up to USD 2 Million as a long-term strategic partner. According to its website (http://innovation.kaust.edu.sa), the KAUST Innovation Fund focuses on ventures in the fields of high technology related to solar and alternative energy, water technologies, ICT, material and chemical science, and electricity/electronics.[20]

Table 20: Saudi public-sector PE/VC entities

Organization	**Fund Size**	**Focus / Niche**	**Market**
King Abdullah Economic City (KAEC)	SAR 10 Million (USD 2. Million)	ICT	Saudi Arabia
King Abdullah University for Science a Technology (KAUST)	USD 200,000	ICT	Saudi Arabia
Ministry of Commerce & Investment (Fund of Funds)	SAR 4 Billion (USD 1.1Billion)	N/A	Saudi Arabia
Misk Fund	SAR 200 Million (USD 53.4 Million)	ICT	Saudi Arabia
Saudi Aramco Ventures	USD 200 Million	ICT	Saudi Arabia
Saudi Aramco Energy Ventures	USD 500 Million	Oil & Gas	Global
Taqnia	N/A	ICT	Global

[20] As a founding member of the KAUST Endowment, the present author can confirm this information and has indeed physically visited many of the projects funded.

At SAR 4 Billion (USD 1 Billion), the Ministry of Commerce and Investment (MoCI) fund is the largest in this category. According to *Saudi Gazette* (2016a), the fund provides "venture capital funds and private properties, to support and stimulate investment opportunities for small and medium enterprises". Al-Sulaiman, the Governor of the SMEA, has stated that the goal is to boost PE/VC funding for entrepreneurs and SMEs from its current level of 2% to 20% in the shortest time possible *(Alriyadh Newspaper*, 2016).

The SAR 200 Million fund (USD 53 Million) Misk Fund (Misk) focuses on supporting a community of entrepreneurs in such fields as "programming, big data, cyber security, cloud computing, artificial intelligence and the Internet of Things" (Saudi Gazette, 2016c).

Established in 2011, Saudi Aramco Ventures (SAV) is a USD 200 Million development type (as opposed to traditional) VC fund. According to Al-Semari (2011), the development VC model has proved successful in countries such as Germany and the Republic of Korea, which share with Saudi Arabia the tradition of strong government support. SAV provides equity financing to support Saudi start-ups and SMEs, to some degree filling the gap around funding technology based start-ups and growth SMEs in Saudi Arabia. Such SMEs usually (1) have high risk profiles, (2) exhibit unpredictable cash flows, and (3) require larger funding tickets. Saudi Aramco, which is a major supporter of economic development in the Kingdom, "aims to spearhead the development of the local VC ecosystem in addition to aspire to accelerate the development of cutting edge technology and innovation in the Kingdom" (Al-Semari, 2011).

Saudi Aramco Energy Ventures (SAEV) is a USD 500 Million Corporate Venture Capital (CVC) fund. According to Mufti (2014), the fund's CEO, SAEV allocates a part of Saudi Aramco's financial resources to start-up companies in exchange for a minority equity stake. Specifically, its mission is to "invest globally in start-up and high-growth companies with technologies of strategic importance to Saudi Aramco, and to accelerate their development and deployment in the Kingdom" (2014). SAEV focuses on three sectors related to the oil and gas industry (upstream, downstream, and renewable and efficient energy) and on the prototype-to-early-expansion stage. Investment is typically USD 5 to 10 Million over two to three rounds of financing. However, SAEV has been known to invest from USD 1 Million up to USD 30 Million as total exposure per start-up. In addition to its headquarters in Saudi Arabia, SAEV has satellite offices in Scotland, South Korea, and the United States (2014).

The Saudi Technology Development and Investment Company (TAQNIA) is a SAR 500 Million (USD 133 Million) investment fund that was established in 2011 based on a

resolution by the Council of Ministers. According to its website (http://www.taqnia.com), Taqnia aims “to drive accelerated diversification of the Kingdom's economy through knowledge-based industries, thereby creating value-adding jobs, and to help create an innovative ecosystem in the Kingdom”. Thus, it invests in both “local and global technologies and actively engage[s] in the development and growth of those technologies into economically sustainable enterprises”, according to its website (http://www.taqnia.com). Taqnia focuses on two strategic sectors: the self-reliance sector (e.g., life science and health, security and defence) and ICT. In the latter sector, Saudi Arabia has a competitive advantage of leadership in such areas as material science, energy and environment, and water technology.

Table 21 provides basic information on private sector PE/VC entities that the author-researcher was able to confirm as active in funding entrepreneurial/SMEs ventures in Saudi Arabia as of December 2016. Others, such as Sidra Investment and SEDCO Capital, might have been included based on their stated intention to invest in this sector/market, but evidence could not be found of any specific projects funded. Moreover, information was scarce on many of the entities that are included. For example, the website for the 40-year-old Silicon Valley-based Blue Vine Ventures (http://www.bluevineventures.com/), which operates in Riyadh and focuses on the early stage of development of cutting-edge technology projects, provides only a sketchy introduction about the company and contact information. Others, however, provide more information about themselves. For instance, Qotuf, which is an investor in entrepreneurs and SMEs utilizing the Flat 6 Lab Egyptian accelerator model,[21] provides seed funding of SAR 50,000 (USD 13,334) in exchange for a minority stake of up to 10% of the venture. The purpose of such seed funding, per the Flat 6 Lab website (http://www.flat6labs.com/offerings), is to assist start-ups to cover expenses during the incubation program so that they can carry out proof of concept, develop their applications, and move toward commercializing their enterprises.

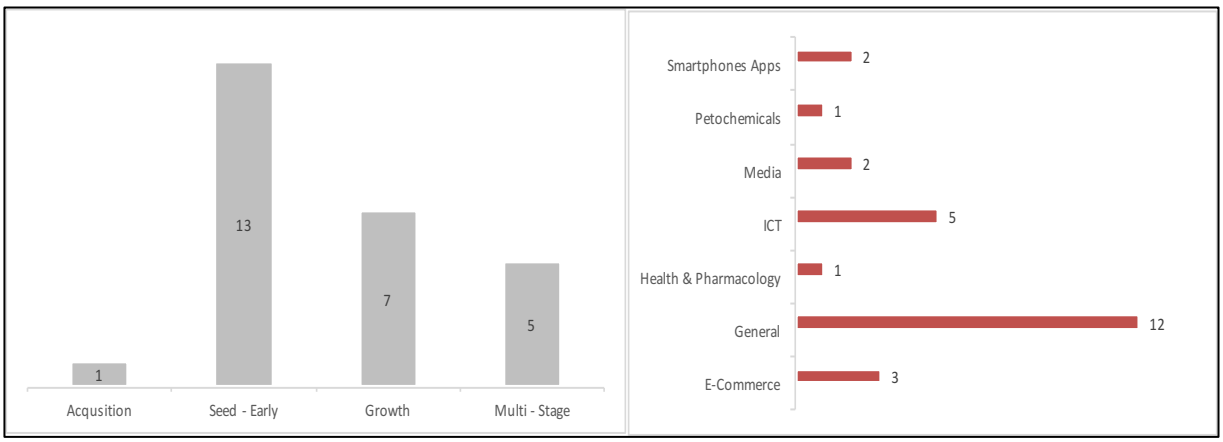
[21] Flat 6 Lab is an accelerator model developed by Alfi, who has both Egyptian and U.S. citizenship. The Saudi base is in Jeddah, but Flat 6 also has partners in the UAE, Lebanon, and Tunisia.

Table 21: Twenty-six private sector's PE/VC entities known to be operating in Saudi Arabia as of December 2016

	PE/VC Name	Nationality	Investment Stage	Focus Area
1	500	USA	Seed - Early	ICT
2	Base Ventures	Saudi Arabia	Seed - Early	ICT
3	BlueVine Ventures	USA	Multi-Stage	ICT
4	MBC Ventures	UAE	Seed - Early	Media
5	Abraaj Group	UAE	Growth	General
6	Alkhabeer Capital	Saudi Arabia	Acquisition	General
7	Amwal Alkhaleej	Kuwait	Growth	General
8	BECO Capital	UAE	Seed - Early	ICT
9	F.A.R. Venture	Saudi Arabia	Growth	General
10	Global Investment House	Kuwait	Growth	General
11	iMENA	Bahrain	Seed - Early	E-Commerce
12	Itqan Capital	Saudi Arabia	Multi-Stage	General
13	Legend's Mist Investment	Saudi Arabia	Seed - Early	E-Commerce
14	Leap Ventures	Lebanon	Growth	Media
15	Malaz Capital	Saudi Arabia	Growth	General
16	Mobily Ventures	UAE	Seed - Early	Smartphones Apps
17	National Net Ventures	Saudi Arabia	Seed - Early	E-Commerce
18	Qotuf Flat 6 Lab	Saudi Arabia	Seed - Early	General
19	Ra'ed Ventures	Saudi Arabia	Seed - Early	General
20	Raz Group	Saudi Arabia	Multi-Stage	General
21	ReAya Holding	Saudi Arabia	Growth	Health & Pharmacology
22	SABIC Ventures	Saudi Arabia	Multi-Stage	Petochemicals
23	Saudi Brothers	Saudi Arabia	Multi-Stage	General
24	Saudi Venture Capital	Saudi Arabia	Seed - Early	General
25	Siraj Capital	Saudi Arabia	Seed - Early	ICT
26	STC Ventures	Saudi Arabia	Seed - Early	Smartphones Apps

Of the 26 companies included in Table 12, 16 are Saudi registered, four are from the United Arab Emirates, two from the United States, two from Kuwait, one from Bahrain, and one from Lebanon. The largest number are general investors (12 entities), and the predominant stage of focus is the seed and/or early development phase (12 entities). However, dedicated areas of investment are in evidence, with investors focusing on areas such as smartphone applications, petrochemicals, media, health care and pharmacology, and ICT. Various stages of development also receive focus, with one firm – an asset/funds management investment company – focusing on acquisitions. Figure 26 provides an overview of the distribution of these characteristics across the identified firms.

Figure 26: Stages and areas of investment focused on by private sector PE/VC entities operating in Saudi Arabia



3.5.2.1.5 Angel Investor Networks

Angel investors, especially when working through institutionalized networks, can – and often do – play a vital role in the development of start-ups and early stage ventures. For instance, according to the organization's website, the Angel Capital Association, which has more the 13,000 members accredited by the U.S. Securities and Exchange Commission (https://www.investor.gov), angel investors in the United States invested USD 22.9 billion in almost 67,000 start-ups and early stage small businesses in in 2012 (https://www.angelcapitalassociation.org). Information on angel investors in Saudi Arabia remains sketchy. However, listings of Saudi angel investors have recently begun to appear on international angel investor network websites such as the Angel List (https://angel.co), which identifies 51 angel investors as residing in Saudi Arabia.

Only two institutionalized angel investor networks appear to exist at present in in Saudi Arabia: Oqal and Sirb. According to its website, Oqal was established in 2011 by a group of young investors and entrepreneurs who are looking for investment opportunities in start-ups in the Kingdom (http://www.oqal.org). As of 2016, Oqal included 120 members and operated branches in the major Saudi cities of Riyadh, Qassim, Jeddah, and Dammam. Oqal members do not typically focus on specific niches; rather, they are interested in any opportunity in which investment would add value both for them and for the entrepreneurs whose projects they fund. To date, they are known to have invested in at least 24 start-ups in sectors that include catering services, transportation and logistics, and education (ibid.).

The Sirb network was established in 2012 by the King Abdulaziz City for Science and Technology (KACST) and is based in Jeddah (Khan, 2013). Sirb works mostly with high tech or technology platform start-up ventures. Unlike Oqal, which offers opportunities only to community members and operates only within Saudi Arabia, Sirb invites both Saudi and non-Saudi angel investors to become involved and to hunt opportunities – and assists them in doing so both domestically and throughout the MENA region. A third difference, moreover, and perhaps the most important from the standpoint of this dissertation, is that Sirb provides entrepreneurs with training in how to pitch to investors (see further below). According to its 2016 Activities Report, Sirb had 30 participating angel investors, had hosted four pitching sessions between 2013 and 2016, and these activities had led to the closing of seven investment deals (out of 14 pitches delivered), with a total value of SAR 26 Million (USD 7 Million). Furthermore, in 2016, one of these start-ups was acquired by a UAE investor and another concluded an offtake agreement with a well-known large Saudi investor (Sirb Angel Investors Network, 2016).

3.5.2.2 Non-Financial Service Providers

As noted previously, the author's field research also identified a number of entities that provide non-financial services vital to the Saudi entrepreneurship and SMEs development ecosystem, particularly in the areas of education and training, mentoring and coaching, operating business incubators and accelerators, and providing co-working spaces. A Saudi Aramco (2008) assessment report identifies the Centennial Fund, the Ministry of Finance (through its SIDF and KAFALA Programs), and the Chambers of Commerce of Riyadh, Jeddah, and Dammam as the first public sector organizations to provide training to Saudi entrepreneurs, in some cases going back as far as 2004. On the private sector side, Bab Rizk Jameel, the Al-Zamil Group, and the Saudi Entrepreneurship Development Institute (SIDI) are entities that can be included in this "first wave" of non-financial entrepreneurship service providers – along with two investors: Malaz Capital (a VC firm) and the now-defunct Arab Business Angels Network.

Table 22: Distribution of non-financial business development services in Saudi Arabia by program type and sponsoring sector as of September 2017

Sector	Non-Financial				Total
	Education & Training	Mentoring & Coaching	Incubation & Accelerators	Others	
Public Sector	36	24	19	8	87
Private Sector	13	11	11		35
International	2	2	1	5	10
Total	51	37	31	13	132

As Table 22 shows, the present author was able to identify a total of 132 non-financial business development programs functioning within the Kingdom as of September 2017.[22] These include 87 programs operated by public sector, 35 by private sector, and 10 by regional or international entities. Following the table, these programs are discussed in separate sub-sections, by sponsoring sector. In this regard, as in many matters addressed in this chapter, published or even printed resources and independent assessments are largely unavailable. The author therefore does not claim to provide a comprehensive or authoritative account of these services, but offers information based on what he was able to observe or learn as a contribution to a field in which further evaluative work is clearly needed.

3.5.2.2.1 The Public Sector

Table 23 summarizes the types of non-financial entrepreneurial and SMEs development services provided by public sector entities operating in this sphere in Saudi Arabia. The considerable diversity in the nature of organizations involved in these services is clear at a glance. Indeed, the list includes chambers of commerce, economic cities, universities, state-owned companies, government ministries, and establishments formed by Royal Decrees. Most of the educational programs represented in this survey,

[22] The only reliable reference available to the author in this regard, the report on business incubators and accelerators issued by BADIR (the business incubator program of KACST), lists only 44 entities. However, it is likely that selection criteria imposed by the compilers of that report – along with the fact that certain entities operate multiple programs/services – account for the higher number identified here.

which are mainly provided by universities, consist of courses and modules in such conventional business school subjects as accounting, finance, operations management, and leadership. Others are customized to more closely suit the needs of entrepreneurs. With respect to business incubators and accelerators, most of the identified programs do more in the way of providing workspace and office services than mentoring and coaching.

Looking more closely at selected examples, number 14 on the table, the Dhahran Techno Valley (DTV) program of King Fahd University of Petroleum and Minerals (KFUPM), was formed in 2010 by a Royal Charter. According to its website, (http://www.gcf.org.sa), DTV relies on deal flow from KFUPM and seeks to advance and commercialize intellectual property arising from university research. Its focus is on projects in areas like petrophysics, drilling, geomechanics, fluids, and production technology (Wahab, 2012).

Number 18, the Ministry of Finances KAFALAH program, was also discussed under financial services. On the non-financial side, KAFALAH provides customized training exercises that are conducted in collaboration with SAMA's Institute of Banking. The Institute of Banking uses the training program of the International Finance Corporation (IFC).

Generally known simply as "Saudi Exports", The Saudi Exports Development Authority (number 32) is an independent governmental body that was founded in 2013 (www.saudiexports.sa). Its mission is to contribute to developing the non-oil economy through facilitating and managing Saudi product exports, with a focus on SMEs. Specific objectives in this regard are threefold: (1) to enhance the readiness of Saudi SMEs to export to international markets, (2) to help Saudi SMEs generate opportunities in international markets, and (3) to promote the efficiency of the SMEs ecosystem in order to facilitate access to international markets. To meet these objectives, Saudi Exports focuses on providing training programs and workshops in areas of particular importance to export entrepreneurs – such as logistics, policies and procedures, and export regulations – as well as mentoring from knowledgeable experts.

Table 23: Public sector non-financial service programs in Saudi Arabia as of September 2017

	Name of Providor	Education and Training	Mentoring and/ or Coaching	Incubator and/ or Accelerartor	Other Service/ Program
1	Takamol Holding (910ths)	X	X	X	
2	Abha Chamber	X			
3	Alsharqya Chamber	X			
4	Bedayat Engineering		X	X	
5	Human Resources Development Fund	X			
6	Industrial Development Center ((IDC)	X	X	X	
7	Imam University Entrepreneurship Center	X			
8	Jazan Chamber	X			
9	Jazan University	X			
10	Jeddah Chamber	X			
11	King Abdulaziz City for Science and Technology	X	X	X	
12	King Abdullah Economic City (KAEC)	X	X	X	
13	King Abdullah University (KAUST)	X	X	X	
14	King Fahd University (KFUPM) Dhahran	X	X	X	
15	King Khalid Foundation	X			
16	King Saud University	X	X	X	
17	Makkah Valley	X	X	X	
18	Ministry of Finance (SIDF & KAFALA Programs)	X	X		
19	MiSK Foundation	X	X	X	
20	Namaa Almunawara	X	X	X	
21	National Entrepreneurship Institute (RIYADAH)	X	X	X	
22	Prince Mohammad Bin Salman College	X			
23	Prince Salman University	X			
24	Prince Sultan Fund (Women)	X	X	X	
25	Princess Nora University	X	X	X	
26	Qaseem Chamber	X			
27	Riyadh Chamber	X			
28	The Centennial Fund	X	X		
29	Saudi Aramco Entrepreneurship Center	X	X	X	
30	Saudi Credit & Savings Bank	X	X	X	
31	Saudi Commission for Tourism & Antiquities	X			
32	Saudi Exports	X	X		
33	Saudi Org. for Certified Public Accountants	X			
34	SIRB Angel Investors Network	X	X		
35	Technical and Vocational Training Corp.	X	X	X	
36	The Institute of Banking	X			
37	University of Dammam	X	X	X	

3.5.2.2.2 The Private Sector

The Saudi private sector is becoming increasingly active in the area of training and mentoring entrepreneurs and incubating their businesses. Table 24 summarizes the types of programs offered by the 16 entities identified by the author as active in this regard as of September 2017. Note that only providers of academic curricula or branded training modules are identified as purveyors of “education and training”, and that the list could be longer if it included programs that use professional trainers or subject matter experts to train or transfer knowledge to entrepreneurs in a more open or ad hoc manner. Several private universities are included in the list, including Effat University (6) and the

University of Technology and Management (16), both located in Jeddah and both of which have established professorial chairs with the responsibility of building entrepreneurship curriculums. Injaz Saudi Arabia (8), by contrast, is part of the MENA regional office of the U.S.-based program Junior Achievement Worldwide (JAW), which was established in 1919 to "inspire and prepare young people to succeed in a global economy" (www.juniorachievement.org). Injaz Saudi Arabia implements JAW programs, mainly at the high school level. Its educational programs focus on the areas of entrepreneurship, financial literacy, and work readiness, but also cover such topics as business ethics and local economic issues. To date, Injaz Saudi Arabia has conducted 18 different programs targeting both male and female students up to age 24, in all parts of the Kingdom (http://www.injaz-saudi.org/).

Table 24: Private sector non-financial service programs in Saudi Arabia as of September 2017

	Name of Providor	Education and Training	Mentoring and/ or Coaching	Incubator and/ or Accelerartor	Other Service/ Program
1	AHZ Comm. Service Center	X	X		
2	Arabian Enterprise Incubator		X	X	
3	Bab Rizq Jameel	X	X		
4	Dar Alhikmah University (Women)	X			
5	Deem Almanahil	X	X	X	
6	Effat University (Women)	X			
7	i2 Institute	X	X	X	
8	INJAZ Saudi Arabia	X			
9	Mobily Ventures	X	X	X	
10	Qotuf - Flat 6 Lab	X	X	X	
11	RAZ Group	X	X	X	
12	Saudi Entrepreneurship Development Institute	X			
13	Saudi Mentors Network		X		
14	STC Ventures	X	X	X	
15	The Space		X	X	
16	University of Technology and Management	X			

3.5.2.2.3 International Programs

For the high-profile entities that operate non-financial service business development programs in Saudi Arabia, the issue of corporate social responsibility (CSR) has become vital recently owing to the evolution of the Kingdom under the Vision 2030 plan. However, some of these entities had made a point of offering service to society even prior to this milestone, presumably because their management was aware of the fact that "various economic, environmental, ethical, governance, and social…factors significantly affect the fate of [a] company in long term" (Chan, 2014, p. 1).

Table 25 summarizes the activities of seven international entities that the author was able to confirm as operating non-financial services for entrepreneurs and nascent SMEs as of September 2017. Per the field research, the programs in question provide services in four areas: education and training, mentoring and coaching, incubation, and 'other' (typically technical support) services. One entity operates in all of these spheres: General Electric (2). A longstanding presence in the Kingdom, GE has been responsible for many initiatives in Saudi Arabia, especially in the areas of turbine engineering, military/aerospace technologies, and medical applications (http://www.ge.com/sa). To support innovation and entrepreneurship, GE provides high-tech education for potential engineering entrepreneurs, including an annual program that trains 200 young Saudis in technical areas that fall under some of the multinational conglomerate's many areas of expertise. More recently, GE established its Saudi Innovation Center with the goal of fostering social innovation. The Center provides innovative Saudi entrepreneurs and academic researchers with access to its advanced laboratories in the fields of measurement and controls, digital energy, 3D printing, and prototyping (https://www.ge.com/sa/b2b/investing-in-innovation).

Table 25: Non-financial service programs operated in Saudi Arabia by international entities as of September 2017

S/N	Provider	Education and training	Mentoring and /or coaching	Incubator and /or accelerator	Other services
1	Amazon				X
2	General Electric	X	X	X	X
3	Google				X
4	Endeavor		X		
5	Microsoft				X
6	SAP				X
7	Shell	X			

Another well-known international giant that provides entrepreneurial education and training in the Kingdom is the oil company (Royal Dutch) Shell (7). In 1982, Shell introduced its Shell-Livewire training program, and since then more than nine million persons have participated. According to its website (www.shell-livewire.com), Livewire is a "Social Investment Program, which enables young people to start their own business and create employment". The version of this program offered in Saudi Arabia, known as

Shell-Intilaqah, has proved highly successful and has garnered the involvement of ten other major entities that work closely with Shell in educating potential entrepreneurs (www.intilaaqah-ksa.com). Among these collaborations is a cooperation agreement, signed in 2015 between Shell and the Royal Commission for the industrial cities at Jubail and Yanbu (http://www.rcjy.gov.sa), to provide training to entrepreneurs with the goal of enriching these sites through the development of SMEs. In May 2017, Shell signed a memorandum of understanding (MOU) with King Salman Social Center to provide training to empower women. In June 2017, Shell signed a MOU with the SMEA to further increase efforts to provide training to entrepreneurs in Saudi Arabia.

Table 26: Shell Intilaqah Training Program: sessions and components

Training Sessions	**Training Components**
Bright Ideas + Workshop	• Develop their creative thinking abilities • Understand the skills and characteristics of successful entrepreneurs • Generate a list of possible business ideas • Evaluate the ideas generated • Develop a personal action plan
Business Planning + Management Training	• An explanation of what the business will do • Who is involved in the business and what skills and resources they bring • A view on who will buy the product or service and why • A marketing plan • Financial forecasts, an explanation of overall viability whilst giving an indication of finance already available and further finance required • An estimated cash flow forecast
Business Start-ups	• Access to available financing/ funding
Post Start-up Support	• Mentoring / Coaching * Not available in Saudi Arabia
Performance Management & Refinement	• KPIs Program

Shell-Intilaqah is described in considerable detail on the program's website. As summarized in Table 26, the program consists of five main sessions that lead participants from the initial ideation phase through key performance indicator (KPI) monitoring. Notably, too, Shell has established an agreement with the Saudi Social Development

Bank to provide Intilaqah program graduates with status that makes them eligible for funding (www.intilaaqah-ksa.com).

In 2012, Endeavor (4) began providing education and mentoring to entrepreneurs in Saudi Arabia. Established in 1997 in the United States, Endeavor is a non-profit organization that seeks to support high impact entrepreneurs in their efforts to scale up their projects and form companies that generate both profits and jobs. At the time of the field research, the organization claimed to have helped 708 such individuals in 15 countries to meet this goal, generating USD 5 Billion in revenue and creating 200,000 jobs (www.endeavor.org). Endeavor Saudi Arabia essentially mobilizes the model developed by the parent organization, which emphasizes mentoring and networking. There is, however, an additional focus on helping selected entrepreneurs to access so-called “Smart Capital”, which results from close mentoring by professionals from high-profile consultancy firms such as KPMG, Bain and Company, and Ernest and Young. To date, Endeavour Saudi Arabia has helped 12 entrepreneurs to form or expand nine companies, leading to the creation of 500 new jobs and to 111% growth in revenue (www.endeavor.sa).

In addition to the industrial giants GE and Shell and the non-profit Endeavor, tech/online firms Amazon (1), Microsoft (5), SAP (6), and Google (3) have recently signed on to provide cloud-based services to support entrepreneurs in Saudi Arabia, mainly in connection with start-ups (Alhussain, 2017). SAP and Google have not, as of this writing, initiated service provision (Alhussain, 2017). Microsoft, however, already provides selected Saudi entrepreneurs with a free year of its USD 250 per month cloud solutions package for startups: Microsoft Azure. Those who show progress can be eligible to receive an advanced set of cloud services worth USD 10,000 per month for one year. In 2016, Microsoft supported 11 entrepreneurs in building four start-ups, providing services worth USD 1,3 Million (Alkhudair, 2017).

Similarly, via an April 2017 agreement with the BADIR incubator, Amazon offers its low-cost Amazon Web Services (AWS) package to Saudi start-ups in tech fields. The package includes innovative cloud technologies and solutions and is provided free of charge to selected Saudi start-ups for two years (*Saudi Gazette*, 2017).

3.5.2.2.4 Mentoring and Coaching Programs

A good indicator of the importance of mentoring in successful entrepreneurship is the analysis conducted by Patel (2012), who concluded – based on a survey conducted by

Micro Mentor (https://www.micromentor.org) – that “those who received mentoring increased their revenue by an average of $47,000, or 106% [whereas] those who did not receive mentoring only increased their revenue by an average of $6,600, or 14%.” Awareness of the value of mentoring is becoming increasingly widespread in the business development community in Saudi Arabia, where programs in this area are nascent but are growing in number and increasing in sophistication. Based on the field survey, mentoring and coaching are currently conducted in 32 identified incubators and accelerators across the Kingdom. Indeed, given the recent increase in momentum in the areas of innovation and entrepreneurship development, Saudi academics have become increasingly engaged in mentoring, in both technical and non-technical aspects of business development, alongside their research and teaching activities and alongside similar efforts from private sector business professionals. Business mentoring and coaching are not yet fully institutionalized in Saudi Arabia. However, the aforementioned Endeavor program and the program at the Startup Lab of the Saudi Aramco Entrepreneurship Center in Dhahran have both reached a considerable level of sophistication and success. The Startup Lab, which was established in 2000 to “remedy a gap in how the university supports emerging entrepreneurial ventures”, uses the MIT Mentor Venturing Services (MVS) approach (mvs.nit.edu). As such, the program focuses on carefully selecting mentors who bring to new entrepreneurs and their projects the benefits of their rich experience as business founders and/or high-level executives.

3.5.2.2.5 Entrepreneurship Education and Training Programs

Notably, certain training modules were not included in the above discussion because they do not educate participants in entrepreneurship in the sense of building business entities, but essentially teach self-development while providing basic training in business. In other words, programs offered by Abdulateef Jameel (Bab Rizk Jameel) and other entities train so-called micro-financed entrepreneurs to become self-employed. The training programs provided by Bab Risk Jameel and by AHZ, for example, focus on how to sell products in the local market, and this often includes homemade products. Much of the training is provided by volunteers, who typically share their own experiences of how to manage a micro business through workshops and face-to-face mentoring.

In general, entrepreneurship education and training in Saudi Arabia is an emerging field. Program types range from formal academic courses that make up part of degree curriculums at universities to internationally developed training packages to locally

customized courses. Some programs focus mainly on product prototyping, such as those in the BADIR incubator and Flat6 Lab. However, most focus on the goal and process of formulating business plans, as well as on providing basic business courses in fields such as accounting, finance, and management.

Table 27: Entrepreneurship education and training programs employed in Saudi Arabia

Training Program Package	Program Origination	Who uses this program? (Entrepreneurship Development Organizations in the Kingdom)	Focus on Technical Skills (i. e. Feasibility Study & Business Plan Formulation)	Focus on Soft Skills or Includes How to Pitch / Develop Competencies	Includes how to deal with Investors / How to raise fund?
Injaz Saudi Arabia	Junior Acheivement Worldwide United Statres	Ministry of Education	X	X	
Dr. Nabil Shalaby	Egypt	Alsharqya Chamber	X		
Shell - Livewire	United States	* Intlaqa * The Centennial Fund * Saudi Social Development Bank * Small and Medium Enterprises Authority	X		
ICF (SME Business Toolkit)	United States	Riyadh Bank	X		
Wa'ed	Bain & company United States	Saudi Aramco Entrepreneurship Center	X		
United Nations Industrial Development Organization (UNIDO)	United States	SIDI	X		
Entrepreneurship Development Institute of India	India	SIDI	X		
Technical and Vocational Training	Saudi Arabia	Technical and Vocational Training	X		
Flat6 Lab	Egypt	Qotuf Flat6 Lab	X	X	
University of Um al-Qura (Makkah Accelerator)	Saudi Arabia	University of Um al-Qura (Makkah Accelerator)	X	X	
RIYADAH	Saudi Arabia	RIYADAH	X		
King Abdullah University of Science and Technology	Saudi Arabia	King Abdullah University of Science and Technology	X	X	

Table 27 identifies the 12 most prominent training packages in use in Saudi Arabia as of September 2017, along with the 14 entities that purvey them. As discussed above, these programs include internationally deployed packages, such as the SMEs Business Toolkit of the ICF, Shell-Livewire, and UNIDO. However, the field research determined that these and the domestically-developed programs also listed in the table cover essentially the same subjects, in both cases primarily under the broad umbrellas of developing feasibility studies or formulating business plans. Subjects touched on under these rubrics typically include customer segmentation, industry context, competitor analysis, strategic positioning, cash flow and breakeven analysis, organizational structuring, and legal issues. A few programs, such as those operated by Flat 6 Lab, Makkah Accelerator, and KAUST, touch on such soft skills as the art of pitching one's ideas. None, however, according to the author's research, provide formal instruction in how to raise funds from investors.

3.6 Explanation of Weak SMEs Performance and Growth Drivers

As noted, the literature on entrepreneurship and SMEs development in Saudi Arabia is sparse, but it does include a number of studies conducted by international management consultancy firms (see Table 12). Although other works reviewed above – such as those authored by Saudi business graduates – are interesting and important, many are more theoretical in orientation, and the consultant-authored studies are likely to provide the most realistic picture of the "on the ground realities" of the current Saudi entrepreneurship and SMEs ecosystem, as well as the most pragmatic recommendations for how to achieve improvements and growth in this sector. As these studies observe, entrepreneurship and SMEs have become increasingly important to the Saudi economy over the last decade or so, yet this sector continues to face tough challenges to competitiveness and even sustainability. On aggregate, in the present author's analysis, the primary challenges identified by these studies – and largely supported by the other literature reviewed and by the author's own observations – are as follows: (1) regulations, (2) culture, (3) human capital development and access to market information, (4) infrastructure support, (5) access to funding, and (6) opportunities.

3.6.1 Regulations

First, it is difficult to either regulate entities or support their growth without agreement regarding relevant definitions and categories, and this has long been a challenge with respect to Saudi SMEs. For instance, The Ministry of Commerce and Investment (MoCI) has long categorized businesses according to capitalization only, whereas SAGIA has based its definitions on number of employees (Ashoor, 2013). Financial institutions, both public and private, have operated under definitions based on their own criteria (Tarkiz, 2012, p. 6). Very recently, however, the newly-established SMEA provided standardized definitions for businesses within this sector (or sub-sector of private enterprise), which were published in the GEM report (la Vega et al., 2017). As summarized in Table 28, enterprises with one to nine full-time employees and annual revenue of up to seven million Saudi Riyals are now officially known as "micro" businesses; those with ten to 49 full-time employees and revenue of seven to 40 million Saudi Riyals are "small"; and those with between 50 and 249 employees and revenue of 40-200 million Saudi Riyals are "medium"-sized.

Table 28: Categories of SMEs as defined by the SMEA

Official Designation	Number of Full-time Employee	Annual Revenue in Million SAR
Micro	1 – 9	0 – 7
Small	10 – 49	7 – 40
Medium	50 – 249	40 – 200

Definitions notwithstanding, there are also gaps in the regulatory framework for Saudi businesses. In particular, the lack of bankruptcy laws, compliance enforcement, and a mechanism for enforcing contracts complicates the relationship between the business community and public and private institutions. At the same time, certain existing regulations contribute to the fact that the overall cost of starting a business in Saudi Arabia is higher than in other comparable emerging economies (Booz&Co, 2008). Some of the issues in this regard are associated with employee retention and third-party hiring, with visa approvals presenting a difficult challenge. The recently-enacted labour law known as “Nitaqat”, moreover, imposes strict requirements on companies to hire Saudi citizens, despite certain skill gaps when compared – as a group – to non-Saudi workers. Indeed, Peck (2016) claims that this program has contributed significantly to the attrition rate among small businesses. Naturally, the government in Saudi Arabia, as elsewhere, has to make difficult decisions in balancing, for example, employment needs with business expediency. Clearly, however, SMEs require a healthy and comprehensible regulatory landscape in order to flourish (United Consulting Group, 2015). In fact, the GEM report identifies policies and regulations as the number one constraint confronting Saudi SMEs, with the obstacle of nepotism and the need for a one-stop platform for bureaucratic regulations among key findings and recommendations (la Vega et al., 2017).

3.6.2 Entrepreneurial Culture

Also according to the GEM report, there is a critical need to strengthen the entrepreneurial culture in Saudi Arabia, yet progress in this regard faces steep challenges, such as the fact that Saudi society is conservative, risk averse, and largely lacking in trust (la Vega et al., 2017). Indeed, the consultant-authored reports agree that Saudi Arabia suffers from a shortage both of entrepreneurial attitude and of entrepreneurship education. Boston Consulting Group (2011), for example, found that Saudi school curricula do not cover or encourage entrepreneurship at any educational

level, and that the “education system [is] not geared towards entrepreneurship” (Boston Consulting Group, 2011, p. 19). Relatedly, success stories of entrepreneurs – either within the Kingdom or elsewhere – are unknown to most Saudis, and many even lack awareness of their own region’s powerful venturing history and former prominence in trading and logistics (as discussed in Chapter 2 above). Promoting such awareness could help foster entrepreneurship and SMEs development (Boston Consulting Group, 2011, p. 19), and there is a clear need for Saudi public institutions and private enterprise to work together to teach and promote the culture and skills of entrepreneurship through educational activities and awareness campaigns (Booz&Co, 2008).

3.6.3 Human Capital Development and Access to Market Information

As discussed earlier in this chapter, an increasing number of organizations have begun to provide more – and more effective – programs in entrepreneurship education over the past decade or so. To a broad extent, however, Saudi entrepreneurs still lack appropriate training, mentoring, and/or coaching. Boston Consulting Group (2011), for example, found entrepreneurial training programs in the Kingdom to be expensive, too generic, and of disparate quality; as the authors explain, “training and advisory services need standardization and harmonization in order to improve accessibility and relevance to entrepreneurs” (Boston Consulting Group, 2011, p. 19). Similarly, United Consulting Group (2015) cites a “Lack in human capital development” (United Consulting Group, 2015, p. 6), and the Korean Development Institute study states that training needs to include customized modules to fill current gaps, such as in technology management, quality control, and financing (Suh et al., 2012, p. 8).

Access to market information is also problematic for entrepreneurs in Saudi Arabia. Market information in the Kingdom is scarce and often unreliable (Tarkiz, 2012, p. 30). Indeed, the GEM report points to “lack of business data and statistics” as a critical issue facing entrepreneurship and SMEs development in Saudi Arabia (la Vega et al., 2017, p. 131). Commissioning custom research, moreover, is an expense that many entrepreneurs cannot afford.

3.6.4 Infrastructure Support

Entrepreneurs need supporting infrastructure to succeed in establishing their ventures. There is a pressing need for more modern and specialized business incubators and

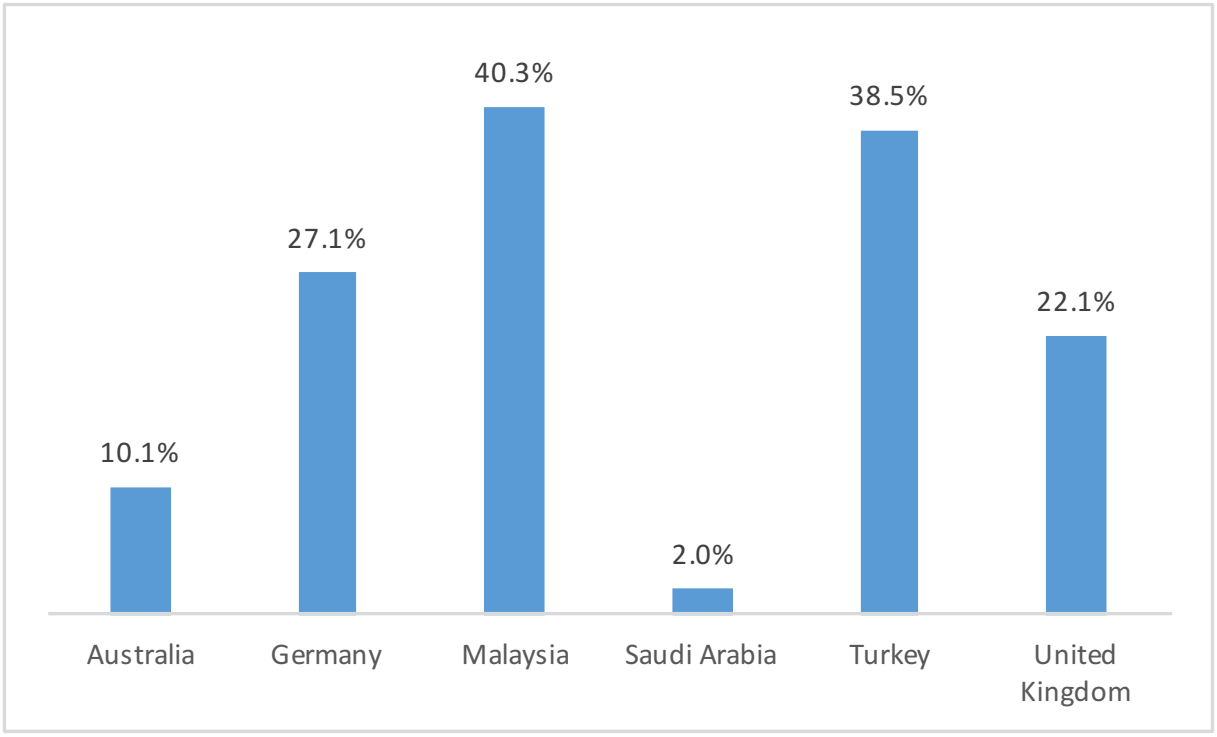
accelerators in the Kingdom – and those in which experienced mentors help in the birth and growth of start-up enterprises are most likely to make a positive difference. As examined above, a number of entities of this kind now exist within Saudi Arabia. Nonetheless, the same need for further development of this key infrastructural element that was cited in the (Booz&Co, 2008) study remains an issue according to the much more recent GEM report (la Vega et al., 2017, p. 131).

3.6.5 Access to Funding

Financing is a critical issue for entrepreneurs and SMEs. High-ranking government officials have acknowledged this challenge as an important one that they are working to address through targeted programs (Al-Jasser, 2010). According to an official in the Council of the Saudi Chambers, in 2015 29% of SMEs in the Kingdom left the market due to financial difficulties (United Consulting Group, 2015, p. 3). Indeed, a study conducted by the Riyadh Chamber found financing to be the second greatest obstacle, after government bureaucracy, to the establishment of new entrepreneurial ventures (Ashoor, 2013).

A Saudi Aramco assessment report and subsequent follow-up both found lack of financing to be the most pressing issues for companies in Saudi Arabia with 20 to 100 employees (Booz&Co, 2008; Tarkiz, 2012). A major factor in this regard is that banks and other financial institutions often shy away from lending to such companies because they consider their track record and/or assets to be insufficient. While such reticence is not unique to Saudi Arabia, its impact in the Kingdom is disproportionate to other economies, which signals both a problem and an opportunity for improvement. As Figure 27 shows, only 2% of total commercial loans in Saudi Arabia were provided to SMEs in 2013. By comparison, more than 20% of loans went to this sub-sector in two of the developed economies shown in the figure (Germany and the United Kingdom) and around 40% in two developing economies (Malaysia and Turkey). The percentage of total business loans going to SMEs in Saudi Arabia over a recent five-year period, moreover, has been calculated to be seven times less than that for non-GCC MENA countries (United Consulting Group, 2015, pp. 10-11). Clearly, there is a need for targeted public funding schemes and for private sector sponsored venture capital seed funding in Saudi Arabia to enable SMEs to begin to contribute to the Kingdom’s economy on a par with what is taking place in other developing economies.

Figure 27: SMEs loans by percentage of total commercial loans in Saudi Arabia and five comparator nations, 2013



Source of information: United Consulting Group, 2015

3.6.6 Opportunities

The sixth most consistently and prominently identified challenge to growth for Saudi SMEs in the consultant-authored studies is the paucity of procurement opportunities for firms in this sub-sector. Some positive steps are underway to address this challenge. For instance, state-owned companies have embarked on "local content" procurement programs to encourage the development of local enterprises. These programs aim to localize foreign firms and to support the growth of existing local companies by procuring goods and services from them (Booz&Co, 2008). Such efforts should be supported and expanded upon. Nevertheless, it must be acknowledged that a great deal of ground still needs to be made up in this regard, as the most recent of the studies in question, the GEM report, identifies the same challenge noted by its predecessors; in this regard, the authors cite competition from larger businesses as a major constraint on SMEs' efforts to gain access to market opportunities (la Vega et al., 2017, p. 131).

Indeed, overall the recent GEM report agrees with the earlier consultant-authored studies – and broadly with the present author's field research and with the other sources reviewed above – on the six major constraints facing entrepreneurship and SMEs

development in Saudi Arabia and on the significance of the challenges that the relevant issues present (la Vega et al., 2017, p. 131). The goal of the Kingdom's Vision 2030 strategic transformation plan to increase the contribution of the entrepreneurship and SMEs sector to the Saudi Arabia GDP from 20% (as of 2015) to 35% by the year 2030 constitutes a statement of intention by the Saudi government to address these challenges aggressively.[23] Clearly, however, the task will not be an easy one, and all stakeholders will need to work to transform both the attitudes and the systems that shape the entrepreneurship and SMEs ecosystem if the nation is to achieve this goal.

3.7 Potential Growth Drivers to Strengthen SMEs' Performance

> [It] is clear that institutional support for entrepreneurship needs to be overhauled if the nation is to harness the capabilities of its youth. Regulations around opening and funding a new business venture need to support the establishment of new engines of job creation. Most importantly, we need to close the gap between the entrepreneurial aspirations of the population and the skills they acquire through their education. (la Vega et al., 2017, p. 5).

In light of the above considered challenges, one can conclude – as the consultant-authored studies collectively do – that key potential growth drivers needed to strengthen the performance of the Saudi SMEs sub-sector include regulatory reform, improved access to funding and to business data, and upgraded and more targeted training in order to develop the human capital resources of entrepreneurs and their employees. With respect to regulatory reform, Al-Sulaiman, the Governor of the SMEA, has noted that key challenges faced by Saudi entrepreneurs include obtaining work permits for non-Saudis who possess the expertise needed for a given enterprise to succeed, as well as the more general problem of obtaining skilled labour. He also stated that the intention of the SMEA is to assume responsibility for this issue, which has been handled by the Ministry of Labor (Mazeej Management Consulting, 2017). With regard to the equally critical issue of access to funding, Alfaadhel states that "the biggest concern is the attitude of banks towards SMEs" (2010, p. 153). Indeed, per the GEM report as well, financial institutions

[23] The Governor of the SMEA acknowledged and promised to work to address these challenges during a meeting with members of the Saudi business community in the Qassim Chamber of Commerce and Industry on 4 January 2017.

need to be less risk averse in lending to entrepreneurs and SMEs (la Vega et al., 2017). Per Al-Sulaiman, the SMEA is working closely with SAMA, which functions as the Saudi Arabian Central Bank, to resolve this challenge through restructuring the approval processes for funding SMEs (Mazeej Management Consulting, 2017).

At present, moreover, Saudi SMEs essentially "function without the availability of basic statistics and data needed to ensure sound business decision making" (Tarkiz, 2012). This aspect of the SMEs environment in Saudi Arabia will need to be improved significantly in order to achieve meaningful growth in this sector, as will various aspects of human capital development. Boston Consulting Group (2011) and the Korea Development Institute (Suh et al., 2012), for example, emphasize the goal of developing human capital through providing on-the-job training as well as matching human capital to the labour needs of SMEs. These studies, along with that conducted by United Consulting Group (2015), moreover, also stress the need to improve the overall environment for entrepreneurship by fostering a culture that allows creative ideas and innovation to flourish and that is less risk averse. At the same time, they stressed the need to develop a more professional businesses environment in the Kingdom, one that includes more advanced and more widely available business consultancy services and greater access to business data and to up-to-date information systems (see also Zafar et al., 2015).

3.8 Summary and Potential Contribution to Practice and Literature

This chapter addressed the following six topics: (1) the evolution of Saudi entrepreneurship and SMEs as seen through the literature, (2) the current innovation and entrepreneurial environment, (3) SMEs' current state and contribution to GDP and employment, (4) the organizations and programs that support financing and training for Saudi entrepreneurship and SMEs development, (5) explanation of weak SMEs performance and growth drivers, and (6) potential growth drivers to strengthen SMEs' performance. The first section identified three historical phases in the evolution of the literature on Saudi entrepreneurship and SMEs: from its infancy in the late 1950s to 2004, from 2004 to 2010, and from 2010 to present. In the first of these phases, Farmer (1959) constituted a milestone in literature on Saudi business, and the era was marked by the significant role of corporations in fostering entrepreneurship and SMEs development in the Kingdom. Future research on this phase might compare the role of large corporations in fostering entrepreneurship and SMEs in Saudi Arabia to the case of similar emerging

economies and/or further investigate the role played by the Saudi Arabian Oil company (later Saudi Aramco), which has been something of a black box in terms of information for researchers.

For the second and third sections, the present dissertation drew primarily upon such recent assessments as the G20 Entrepreneurship Barometer report of 2013, which concluded that the government of Saudi Arabia is working seriously to overall the business environment, but that a paradigm shift is needed to enable the success of these efforts (Abu-Sharkh & AlShubaili, 2013, p. 2). Similarly, the Global Entrepreneurship Monitor report, upon which these sections also relied heavily, found that progress has been made, but that Saudi Arabia remains below the MENA average in key areas, including ratings for financial regulations, education, and entrepreneurship culture (la Vega et al., 2017, p. 124). With regard to innovation in the Kingdom (section 2), tangible progress was identified when comparing ratings for 2015 with similar indicators from 2001, and this was seen reflected in the Kingdom's rankings among WIPO members. With respect to the contribution of SMEs to the Saudi GDP (section 3), numbers were found to vary from one government agency to another. However, the dissertation adopted Vision 2030's (2016) figure of 20%. For the contribution of the SMEs sector to employment in Saudi Arabia, the third section of this review showed that the contribution has been and remains low compared to other similar economies, based on World Bank figures. Indeed, with Saudi citizens accounting for only nine % of total employment in SMEs, this sector clearly makes an even less healthy contribution to employment in the Kingdom than it does to GDP.

The fourth section surveyed the organizations involved in developing the SMEs sector in terms of access to financing, training, and so on. As explained, there is no comprehensive list available of such organizations operating within the Kingdom, and the "absence of accurate statistical data at the government level" (Alfaadhel, 2010, p. 189) makes it difficult to gauge the role and level of success of those that are known to exist. Indeed, the challenge presented by this information gap has been widely acknowledged in recent academic studies of the Saudi SMEs environment (Abousaber, (2013). However, the present author was able to some degree to overcome this limitation by accessing information through direct involvement and through personal contacts as a longstanding member of the Saudi business community. The resulting compilation of information may thus be of considerable use as a foundation for future research.

The fifth and the sixth sections of the analysis presented in this chapter examined, respectively, the rationale behind the poor performance of the Saudi SMEs sector and

drivers that could potential strengthen its growth. Here, the focus was on the insights and conclusions provided by a set of studies – introduced earlier in the chapter – conducted over the past decade or so by professional management consultancy firms at the behest of stakeholders in Saudi Arabia.[24] Their assessments showed, in the present author's analysis, six key areas of challenge: (1) regulations, (2) culture, (3) human capital development and access to market information, (4) infrastructure support, (5) access to funding, and (6) opportunities. The recent GEM report was found to essentially reinforce the findings of the earlier studies in this set in this regard, as well as in concluding that institutional support in the Kingdom needs to be revamped with a focus on improving regulations associated with funding start-ups and SMEs and on developing the required human capital through education and training (la Vega et al., 2017, p. 5). In other words, as stated more broadly by the present author under the heading of key potential growth drivers, the aggregate of information and assessment provided by GEM, the other consultant-authored studies, and the balance of the sources reviewed for this dissertation suggests that crucial steps toward strengthening the performance of the Saudi SMEs sub-sector include reforming regulations, improving access to funding and to business data, providing better and more targeted entrepreneurial and business training, and creating a more innovation- and venture-friendly environment.

[24] Most of the academic studies on entrepreneurship and SMEs known to the present author to have been conducted recently in Saudi Arabia, such as the doctoral dissertations cited in the preceding paragraph, did not take account of these important studies. The extent to which they are summarized and incorporated here may contribute significantly to the usefulness of the material presented in this chapter as a basis for future research in this area.

CHAPTER FOUR: THEORETICAL FOUNDATION

4.1 Introduction

The overview of Saudi Arabia's history and socioeconomic context presented in Chapter 2 highlights the reality that the Kingdom's economy cannot continue to rely heavily on a single commodity, namely oil. As also noted, this context and other significant challenges facing the country, such as low youth employment, are the motivation for and the primary targets of the nation's new visionary transformation plan. The plan and its framers acknowledge the need to engage the Saudi private sector more substantially to meet the key goals of diversifying the economy and creating jobs for Saudi citizens. Specifically, the designated target is to increase SMEs' contribution to the national GDP from its current 20% to 35% by 2030 (Vision 2030, 2016b).

In Chapter 3, in light of these facts and of the study's intention to investigate improvements that might be made to help achieve this goal, we explored the entrepreneurship and SMEs development ecosystem in the Kingdom by examining its history, current status of innovation and entrepreneurship, and the current state and contribution to GDP and employment of Saudi SMEs. In addition, we surveyed the organizations involved in developing this subsector in the Kingdom, focusing on financing and training, which the literature—particularly the consultant-authored assessment studies—identified as pressing needs. Finally, we examined the factors underlying the present poor performance of the Saudi SMEs sector, which were identified in such areas as policy and regulations, the entrepreneurial culture, access to knowledge and human capital, infrastructural support, access to funding, and business opportunities.

As noted, the need for access to financing and for more and better entrepreneurship education and training in Saudi Arabia, which was explained by Al-Hajjar (1992) and by the Chamber of Commerce Council (1997), has received significant attention in subsequent literature (Abalkhail, 2009; Abousaber, 2013; Albakr, (2016); Alfaadhel, 2010; Almahdi and Dickson, 2010; Alsheikh, (2011); Kayed and Hassan, 2013; Khan, 2013; Loony, 2004; Minkus-McKenna, 2009; Porter, 2008, 2009, 2010; Sadi, 2010; Sulaimani, 2015). Also, for the international business consultants from whom studies were commissioned, quality entrepreneurship education and training were a significant concern, as noted by Booz&Co. (2008), Boston Consulting Group (2011), and Tarkiz (2012). International reports, such as the Global Entrepreneurship Monitoring (2016) and

the Global Entrepreneurship Index (2017), also considered financing and training as critical developmental factors for the Saudi SMEs ecosystem.

This chapter provides a literature-based examination of the theoretical underpinnings of the study's conceptual framework and its research questions, all of which are presented in Chapter 5. Accordingly, the remaining sections of this chapter address the following: (1) the definition of the entrepreneur, (2) credit and financing for entrepreneurs and SMEs, (3) credit rationing impact on entrepreneurs, (4) credit rationing causes, (5) human capital and entrepreneurship, (6) signaling theory and entrepreneurship, (7) entrepreneurship education and training, and (8) chapter summary.

4.2 The Definition of the Entrepreneur

Neergaard and Parm Ulhøi (2007) explain that entrepreneurship is "as old as civilization itself" (p. 1). However, establishing a baseline definition is not a simple matter, as the concept and practice of entrepreneurship have evolved over time, and scholars and theorists have contributed to our understanding in a variety of ways. Mises (2013 [1949]), for example, states that any definition of an "entrepreneur" is based on how theorists see such a person's role in the market and in profit making, but he also explains that the language used by scholars and theorists plays a major role (i.e., different economic theories impose different interpretations on our construct). This concept could explain why Carter and Han (2015) say that "Identifying and locating nascent entrepreneurs is neither easy nor inexpensive" (p. 1). The only perspective that seems unanimous is that entrepreneurship lacks "a single precise definition" (Valerio, Parton, & Robb, 2014).[25]

According to Blaug (2000, p. 76)), Karl Marx (1818–1883) did not assign a distinctive role to the entrepreneur in his analyses of business and economic processes. Other classical economists, such as Adam Smith (1723–1790) and David Ricardo (1772–1823), treated "entrepreneur" and "capitalist" as synonymous, while still others, such as Richard Cantillon (1680s–1734), distinguished the entrepreneur from the capitalist based on the function of the former as someone who takes risks. Jean Baptiste Say (1767–

[25] Even repetition does not necessarily help in identification. In the preceding chapter, I used the term 'serial entrepreneur' to refer to someone I know has extensive experience guiding a series of start-ups. Similarly, in their information-rich article on entrepreneurs in Ghana, Robson et al. (2013) define 'habitual entrepreneurs' as 'entrepreneurs with prior business ownership experience' (351). However, there is no consensus in the literature as to what role such experience plays – i.e., what impact it has, so to speak, on the start-up equation (see Ucbasaran et al., 2010 and Robson et al., 2013).

1832), the father of the “Law of Markets,” made the same distinction and defined “entrepreneur” as the “buyer and coordinator of the services of land, labor, and capital” (*Encyclopedia of World Biography*, 2004). Subsequently, the Austrian school of economics contributed significantly to our understanding of the concept. Joseph Schumpeter (1883–1950) argued for the definitional criterion that “technical innovation and dynamic change” are part of the role of the entrepreneur (Blaug, 2000, p. 76). More pragmatically, Ludwig von Mises (1881–1973) described an entrepreneur as “anyone who buys cheap and sells dear” (2013 [1949], p. 76). His student, Israel Kirzner, has more recently identified entrepreneurship as “an individual action” and specified “Alertness [as] the key attribute of the... entrepreneur” (Douhan, Eliasson, & Henrekson, 2007, p. 216). This emphasis on profit-making and opportunism (i.e., goals and characteristics) is counterbalanced by Mark Casson (1945–), who offers a more logistically focused definition when he refers to the entrepreneur as “one who makes judgments about the coordination of resources” (Blaug, 2000, p. 76).

The above precis provides some idea of the rich diversity of perspectives that have been offered with respect to the definition of entrepreneurship—ranging from the neo-classical approach, which centers on the notion of equilibrium under perfect competition, to that of the Neo-Austrian Kirzner, who conceives of the entrepreneur as someone who is continuously seeking new information and scanning markets for opportunities. The literature on the subject presents a dizzying array of definitions. One that brings together many of the diverse threads in this regard is offered by Arizona State University (2012), which identifies the entrepreneur as someone who “develops, manages and assumes the risk of an enterprise; one who sees a problem as an opportunity; one who creates value.”

Several interesting perspectives are also offered by Volkmann et al. (2010) in their book *Entrepreneurship in a European Perspective.* The authors seek to identify the characteristics of an entrepreneur in three categories: personal traits, function, and behavior. With respect to traits, they reflect at length over the issue of whether entrepreneurs are born or made (educated), and ultimately conclude that it is impossible to correlate successful entrepreneurship with a specific personality type. The authors determine that it is nurture, not nature that is, broadly speaking, responsible for creating entrepreneurs. With regard to functionality, they consider the entrepreneur’s role in transforming resources into products and services to be linked with the concept of innovation in various fields, such as processing, producing, marketing, and even organizational structuring for a given venture. Lastly, when it comes to the entrepreneur’s

behavior, the authors find the defining features to lie in how the entrepreneur acts as an individual, which is related to management style. In this regard, the entrepreneur's behavior is completely different from that of the typical administrator, particularly with respect to strategic vision, dealing with resources in terms of control and commitment, and approach to rewards.

Another attempt at a functional definition was offered by the U.S. Small Business Association, which defines the entrepreneur as the "person or team that establishes a venture" (Small Business Association & ASSOC, 2009, p. 168). Dry as this summation may be, it does (in the word "venture") capture something of the Romanticism of the original French word, which translates literally into English as "undertaker" or "adventurer" (pp. 167–168). Wilkes (2015), in an article in the *Financial Times*, also defines the entrepreneur rather dryly as the one who "organises, manages and assumes the risks of a business." A more interesting and ambitious attempt at a broad definition of *entrepreneur* was offered in the most recent Global Entrepreneurship Index Report: a person who improves "economies and people's lives by creating jobs, developing new solutions to problems, creating technology that improves efficiency, and exchanging ideas globally" (Acs, Szerb, & Lloyd, 2017, p. 2). In the end, one is likely to agree with Grünhagen Marko, and Mittelstaedt (2005), who assert that attempts to determine an accurate definition of *entrepreneur* will remain problematic as long as non-entrepreneurs continue to debate the issue.

4.3 Credit and Financing for Entrepreneurs and SMEs

Attempting to understand the problem, which is related to this research, it is important to start with an overview of the credit and financing channels available for startups and SMEs in general. The credit market is defined as "a place where investors with surplus capital provide their surplus capital to those who are in need of capital" (Hoque, Sultana, & Thalil, 2016, p. 3). The credit market includes the money market and the capital market.

The money market provides short-term financing such as collateral-based lending (Hoque et al., 2016). Entrepreneurs rely on bank loans to finance startups and SMEs. However, bank loans, as a favorable option, are not always available to them (Lerner, 2010, p. 55). When bank loans are available, entrepreneurs and existing SMEs must pay higher interest rates (Nguyen & Luu, 2013). The higher rates result from this category of borrowers generally being "considered riskier than large firms because they have lower survival rate, larger variance of profitability and growth" (Nguyen & Luu, 2013, p. 241).

The capital market, which is generally a territory of large firms, raises capital by issuing equity or debt securities (Peterhoff, Romeo, & Calvey, 2014, p. 3). Although Peterhoff et al. (2014) argue that no less than 20% of SMEs in Europe may use this option, only 5% of SMEs went to equity securities and 2% to debt securities in 2013. Options within the capital market involve "high average transaction costs, onerous listing requirements and complex legal and regulatory frameworks" (Peterhoff et al., 2014, p. 3).

Entrepreneurs and SMEs, due to the challenges that prevent collateral lending from being available to them, may consider attempting viability-based financing (Berger & Udell, 2005). Here, other investors, such as angels and venture capitalists, provide financing opportunities to potential entrepreneurs and SMEs that have difficulties in finding access. Those investors, especially venture capitalists, still conduct fact-finding about the entrepreneurs and SMEs within their due diligence process. As in credit markets, venture capital firms, for instance, seek projects with low monitoring and selection costs (Amit, Brander, & Zott, 1998, p. 441). Additionally, such investors focus on investing in productive industries that count more than in the people or the idea as the myth says (Zider, 1998). Moreover, moving toward IPOs is a significant trend for venture capitalists (Jeng & Wells, 2000).

With the non-availability of money market options, the high cost of capital market options, and the mandates of investors such as venture capitalists and their stringent due diligence process, access to financing is not an easy journey for entrepreneurs and SMEs. Helsen and Chmelar (2013) observe that in economic literature, this insufficiency in financing availability is known as credit rationing. Small actors within an economy, such as startups and SMEs, are first to be negatively impacted because of credit rationing (Helsen & Chmelar, 2013).

4.4 Credit Rationing Impact on Entrepreneurs and SMEs

According to the Cambridge Dictionary (https://dictionary.cambridge.org), credit rationing is "a situation in which banks do not lend money to all those who would like to borrow or lend less than borrowers want." Credit rationing is a situation when "SMEs are constrained in their access to formal credit as financial institutions fail to grant credit due to information asymmetry" (Hoque et al., 2016, p. 2). In general, there are two main reasons behind credit rationing: asymmetric information about the borrowers and the effect of the risk on the price of the transaction (Helsen & Chmelar, (2013); Jaffee and Russell, (1976); Stiglitz and Weiss, (1981). The OECD report that was delivered to the

finance ministers of the G20 states that information asymmetry exists due to the SMEs' structural limitation that "lack of transparent and standardi[z]ed information, financial sophistication, reporting capabilities, communication and visibility" (Laboul, 2015, p. 4).

The cause of information asymmetry is not new, as explained by Stiglitz and Weiss (1981). They state that lenders are more likely to not provide credit to borrowers completely, even though there is a sufficient monetary supply. In other cases, lenders provide credit to borrowers, yet less than they request. This shortfall is more likely to happen when the lenders cannot perfectly differentiate between high-risk and low-risk borrowers (Stiglitz & Weiss, 1981). Moreover, "High information costs and risk aversion due to an unproven market-readiness are likely to prevent lenders investing in some new and small firms" (Robson et al., 2013). In other situations, Baltensperger (1978) states that rejection also occurs when demand for loans exceeds the supply at the ruling price, meaning that borrowers' requests are turned down, even though they are willing to pay more in price or non-price elements of a contract.

Stiglitz and Weiss (1981), examining the effect of the risk on the price of the transaction, say credit rationing is an equilibrium feature of the market as banks and creditors are likely to lend up to that level where they may maximize their profits. Due to the existence of imperfect information, banks' interest rates affect the process of borrower selection, in terms of risk; and the actions of borrowers, in terms of choosing projects and incentives for default vs. repayment (Stiglitz & Weiss, 1981). Consequently, a situation of credit rationing leads to credit limitation by formal financing institutes, which has negative impact on the SMEs growth cycle (Hoque et al., 2016). Other types of financial institutions, such as venture capitalists, may succeed in meeting the credit needs of entrepreneurs and SMEs through investing. Such institutions have their own resource limitations, which pose a barrier to fully meeting the credit needs of entrepreneurs and SMEs (Atieno, 2001 in Hoque, 2016).

After examining the situation in Saudi Arabia, the Ministry of Finance developed the "KAFALAH Program," a guarantee vehicle to help local banks lend to entrepreneurs and SMEs toward building their ventures. Although 11 Saudi banks are members of this program, the number of beneficiary entrepreneurs remains minimal. A World Bank report reveals that out of 8.9% of bank funding targeted to SMEs lending, the actual lending amount was only 1.7% (Rocha, Farazi, Khouri, & Pearce, 2010). Eight years after launching KAFALAH Program, only 4,084 cases were funded throughout the Kingdom and mainly in conventional and risk controlled fields such as services and constructions but not in technology (Saudi Industrial Development Fund, 2014). Importantly, Hoque et

al. (2016) note that the credit market does not prefer new SMEs, which can be related to information asymmetry or to the firm's size. A firm's age is also a major factor, indicates its quality in terms of survivability, according to Diamond (1991).

4.5 Credit Rationing Causes

Through literature review, three causes appear to contribute to increasing information asymmetry. Entrepreneurs, especially nascent ones, are unaware of investors' due diligence, entrepreneurs' characters, and skills. Aulet of MIT (2013), who categorizes entrepreneurs as either innovation-driven or SMEs development-driven entrepreneurs, says entrepreneurs need to have two sets of competencies: the mindset and the skillset. Accordingly, Marija Šimić (2015) introduced a general set of investment criteria (see Table 29) in her paper titled *Investment Criteria Set by Venture Capitalists*, identifying 14 criteria based on the identification of Kollmann and Kuckertz (2011). This investment criteria set, which Šimić (2015) identified as the most general parameters used by investors in assessing a venture opportunity, consists of five main factors with the 14 criteria. Three factors are related to the venture's provided technical and business information: product/service, characteristics of the market, and venture's financial characteristics. These factors cover the information that investors clearly want from the entrepreneur, which can be defined, in this study, as the mindset or what an entrepreneur should consider, according to Aulet's (2013) classification. The other two factors are related to the entrepreneur's personality and the entrepreneur's experience, which can be defined as the skillset, according to Aulet's (2013) classification.

Table 29: Investment criteria set by venture capitalists

Factor	Investment criteria	Evidence of criterion's relevance
Entrepreneur's personality	1. Leadership capabilities 2. Commitment	MacMillan et al. (1985), Robinson (1987), Dixon (1991), Muzyka et al. (1996)
Entrepreneur's experience	3. Track record 4. Technical qualification 5. Business qualification	Flynn (1991), Shepherd (1999b), Franke et al. (2006)
Product/service	6. Innovativeness 7. Patentability 8. Unique selling proposition	MacMillan et al. (1985), Mason and Stark (2002), Tyebjee and Bruno (1984), MacMillan et al. (1985), Mason and Stark (2002)

Characteristics of the market	9. Market volume 10. Market growth 11. Market acceptance	Tyebjee and Bruno (1984), Mason and Stark (2002)
Venture's financial characteristics	12. Fit to investment strategy 13. Return on investment 14. Exit possibilities	Muzyka et al. (1996), Mason and Stark (2002), Tyebjee and Bruno (1984), MacMillan et al. (1985), Muzyka et al. (1996), Mason and Stark (2002)

Source: Marija Šimić, 2015

When an entrepreneur reaches out to an investor for funding of a business venture, investors are likely to fail to invest when deals do not "meet their investment criteria [due to] poor quality, and they are often unable to negotiate acceptable investment terms and conditions with entrepreneurs" (Mason & Harrison, 2010, p. 271).

4.5.1 Information Asymmetry: Unawareness of the Investors' Due Diligence

4.5.1.1 Quick Note on the Existence of Due Diligence

According to Rankine et al. (2003), the due diligence conducted by investors today was established after the famous 1988 case of Ferranti acquiring International Signal Controls, which resulted in a catastrophic bankruptcy. Since then, investors have built due diligence investigation processes to help improve their investment decision-making. Due diligence is executed when investors or financiers enter transactions such as joint venture agreements, a loan grant, equity sharing in an existing company or a new business (pp. xv-xvi). Due diligence simply is a "fact-finding mission" (GE Capital, 2012, p. 3). According to Lehman Brown (2014), it is a set of tasks to "offer a background and framework for evaluation of any target firm's future yield and for ascertaining whether or not a sufficient potential for sustainable development exists" (p. 3). In determining a transaction value, for instance, the language used is "specific, complex and extensive" (Roberts, 2010, p. 1). Accordingly, Martin Zwilling (2015) describes the investors' due diligence to entrepreneurs as "mysterious and dreaded."

4.5.1.2 How Does Information Asymmetry Happen?

Information asymmetries happen when "different people know different things" (Stiglitz, 2002, p. 469 in Connelly et. al, 2010). Also, information asymmetries occur when

one party holds information while another party that is supposed to make a decision does not have it (Connelly, Certo, Ireland, & Reutzel, 2010).

Entrepreneurs need to know that investors do their due diligence to seek factual information, via formal and informal ways, “on both the entrepreneur and the venture in determining valuation” (Harrison & Mason, 2017, p. 269). Considering the mindset, as introduced by Aulet (Aulet, 2013) and developed by Šimić (2015), Peter Wirtz (2010) focuses on the importance of the entrepreneur’s mindset aligning with the investor’s mindset toward identifying the strategic opportunity in a venture to reach “monetary earning potential” (2010, p. 43). Thus, Wirtz (2010) explains that investors appreciate the knowledge that an entrepreneur has to help identify the strategic opportunity. Defined general parameters of such areas of knowledge are innovativeness, patentability, unique selling proposition, market volume, growth, and acceptance, fitting the investor’s investment strategy, return on investment, and exit strategy (MacMillan et al. (1985); Mason and Stark (2002); Muzyka et al. (1996); Tyebjee and Bruno (1984) in Marija Šimić, 2015).

Evidence in the literature states that many entrepreneurs, especially nascent ones, do little to prepare their business plans with the information that investors seek, especially in the commercial, financial, and legal areas (Zwilling, 2015). Furthermore, those entrepreneurs may not have a clear understanding of the rationale of conducting due diligence on an entire industry, such as the environmental affairs industry when the venture is in the field of chemical manufacturing or information technology, or the aviation and tourism industries for a travel agency (Angel Resource Institute, 2012). According to Allman (2015), entrepreneurs do not realize the value of time, as a precious factor, for investors. A related factor is the differentiation between types of investors in terms of valuation processes. For instance, in the valuation process with less-committed financiers and investors, business plans and financial statements could be analyzed and a decision made quickly in such “Desktop” cases, as Allman (2015) calls them. The process is different with equity investors, where the valuation discussion starts at a very early stage to prevent any financial gap in perceived value (Allman, 2015). Thus, responding to the investor’s questions or data requests on time is mandatory. Unfortunately, many entrepreneurs are not likely to know what that means, how it happens, or how much it costs the investors (Allman (2015); Angel Resources Institute (2012); Šimić (2015); Zwilling (2015)).

4.5.2 Characters and Skills: Attractiveness Factors

According to Aulet of MIT (2013), the second set of qualifications and competencies that an entrepreneur should have is the skillset. Investors focus on the entrepreneur's characters and skills such as leadership capabilities and commitment, track record, and technical and business qualifications (Kollmann, (2011); Šimić (2015)).

4.5.2.1 Entrepreneur's Leadership and Management Qualifications

Šimić (2015) identifies leadership skills and commitment as the ones that investors usually focus on. This focus aligns with Eisele et al. (2011), who examine the significance of entrepreneurs' personality, especially their management skills, in the German market. A recent study, conducted by Mason and his colleagues (2017) on business angels' reasons for rejecting opportunities, confirm that entrepreneurs and their team's management skills was "the main reason for rejection" (2017, p. 519).

For leadership, technical, and business qualifications, Jo Ann Corkran of Golden Seeds[26] says that for potential venture investments, the focus is on management team, business model, and potential deal breakers in identifying the financial opportunity. If the entrepreneurs, as leaders, and their management team cannot execute, they may not have a company (Bahsin & Giang, 2012). High business competencies appear when the potential venture needs to undergo further assessment. At this stage, an investor is likely to ask the entrepreneur to provide answers for specific questions (Angel Resource Institute, 2012). Rick Vaughn of Mid-America Angels[27] adds that entrepreneurs with high business competencies also ask the investor to provide them the due diligence checklist and related documents when most investors respond to such quality entrepreneurs (Angel Resource Institute, 2012). Corkan states that investors provide entrepreneurs with such checklists. Bahsin and Giang (2012) explain that due to the high competition and the number of paths to better explore the business case, entrepreneurs most likely will have a difficult task as fundraising is complex and costly.

4.5.2.2 Entrepreneur's Business Technical Qualifications

The unawareness of entrepreneurs about the information needed by investors is also related to such factors as entrepreneur characteristics. Hoque et al. (2016) say that

[26] http://www.goldenseeds.com/
[27] http://www.midamericaangels.com/

“Entrepreneur characteristics like age, gender and education have an impact on credit constraints” (p. 6). Their paper focuses on the subject of education as it could “help the entrepreneur to improve skills with the financial market and prepare a good business plan” (p. 6). According to the authors, it makes the entrepreneur leverage the status of “low level of credit constraints” (Hoque et al., 2016, p. 6). They used evidence from Indonesia, where women entrepreneurs were unable to obtain funding due to lack of education and skills. Additional evidence came from Nigeria, where women entrepreneurs were found to be credit constrained because of fragile financial positioning for the same reason (Hoque et al., 2016). These two field examples support the argument that better education and experience lead to higher performance in the execution of both pre- and post-investment processes (Dimov & Shepherd, 2005). Hoque et al. (2016) state that a better quality of knowledge about the financial markets significantly helps entrepreneurs in preparing adequate business plans for potential investors. Thus, entrepreneurs need to know that investors expect them to understand, for instance, the funding requirements they require at every stage in financing (Allman, 2015). This factor could explain the position of some investors when they deem business plans as unattractive and consequently reject them due to imperfect information.

4.5.2.3 Entrepreneur’s Communication Skill

Hoque et al. (2016) say that young entrepreneurs and SMEs are likely to suffer “less opportunity to build up a good relationship with fund suppliers” (p. 6). Giving the attention needed to build a mutually beneficial relationship between investors and entrepreneurs requires proper communication. Two main reasons seem to be a potential justification to build an adequate relationship with investors. The first is to respond to what investors have in mind (Business Insider, 2010), and the second is to build trust (K. W. Thomas, 2010) and give the opportunity to both parties to know, understand, and appreciate each other.

Domingo (2015), for instance, says that he focuses first on the entrepreneur’s talent, personality, and experience before considering what attracts him as an investor in a business venture. The communication process gives investors such an opportunity. Davidsson and Honig (2003) found that nascent entrepreneurs were more likely to succeed if they have good communication skills in the form of connections and being part of a business network, then advance gradually through the start-up process. The communication between an entrepreneur and an investor is about building the covenant.

According to Business Insider (2010), in the business world “the implicit covenant that exists between entrepreneur and investor” is probably the most significant subject not yet being fully understood. Although both parties begin the relationship with great intentions, constraints appear over time to add difficulty. Those constraints include meeting deadlines and recruitment. Thus, financiers and investors form a covenant to govern conflict and to provide the minimum disruption possible (Business Insider, 2010).

Due to the significance of the relationship between an entrepreneur and an investor while working on a deal, Bhoyar and Nagendra (2014), in alignment with Hoque et al. (2016), discuss what entrepreneurs should know and do when dealing with investors. For Feld and Mendelson (2013, p. 5), their book on ventures advises nascent entrepreneurs about how complex and mysterious the relationship with investors or financiers is during negotiations in closing deals and how to overcome this challenge. Khalid Sulaimani (2015), in his book titled *84 Tips for a Successful Startup,* was generous in explaining the importance of having a strong relationship with investors as they have numerous questions to ask. Both Feld and Mendelson (2013) and Sulaimani (2015) explain in more detail how to communicate with investors and what information they are expected to request from entrepreneurs.

Trust, as mentioned above, is a second reason to build a good communication with investors. Entrepreneurs’ biases are an issue, according to Diamond (1991) and Hoque et al. (2016). Many entrepreneurs question financial suppliers’ motivations when they are rejected. However, entrepreneurs need to know that investors are more likely not to be biased in conducting their business as they “don’t use their intrinsic rewards as a guidance mechanism,” but extrinsic rewards as career goals (Thomas, 2010, p. 103). Relying on motivations, which are formed on assumptions, in trying to understand why and how investors act is not an appropriate approach that entrepreneurs should consider. Yet, investors’ motives can be predicted or even understood to a high degree through simply understanding why and how they communicate and seek specific information from entrepreneurs, leading toward an appreciation of the end goal of a funding decision (Deci & Ryan, 2013). Investors’ motivation is most likely about “a certain goal, not a situation” (Jordan, 1952, p. 76). Studying motives, which is the “exploration of the energization and direction of behavior,” (Deci & Ryan, 2013, p. 1) could be considered important for nascent entrepreneurs to learn about for leading them to perform better in building a relationship with investors that may bring mutual benefits.

4.6 Human Capital and Entrepreneurship Education and Training

As seen earlier in this chapter, credit rationing highlights a set of serious concerns appearing to significantly contribute in making financing entrepreneurs and ventures a challenge. The imperfection of information, or information asymmetry, that investors face, is a major issue. Most likely it leads to reaching a “no-where” situation regarding investing in an entrepreneur’s venture since ambiguity exists, according to Mancusi and Vezzulli (2014). The entrepreneurs’ characters and skills, such as the entrepreneurs’ leadership and management capabilities and technical and non-technical qualifications, are another concern. The quality of entrepreneurs’ communication with investors is an example of competencies. The relationship between entrepreneurs and investors is an issue that needs attention to develop a mutually beneficial situation in terms of financing a venture, as such authors as Bhoyar (2014) and Feld and Mendelson (2013) state.

The issue of better educating entrepreneurs is more likely to help in facing credit rationing, advises such authors as Dimov & Shepherd (2005), Hoque (2016), Robson et al. (2012) and Robson et al. (2013). Other authors, such as Fairlie (2012), Fayolle (2009), Henry et al. (2004), Kirby (2004), Lima (2012), Nkirina (2010), mention education in the human capital context with a focus on taking entrepreneurship education and training to a better stage. Gary S. Becker (1993) states that studying entrepreneurship and related factors that are likely to contribute to making successful entrepreneurs has been a topic of interest for researchers for decades. It can be inferred that the underlying motivation for these studies is to correctly guide governmental as well as non-governmental efforts and investments into areas that will yield the best possible results. A favorite among such entities is to invest in “Human Capital” programs (OECD, 2001). Thus, we need examine what the meaning of human capital, its evolution, and economic significance.

4.6.1 Introducing Human Capital

According to the Oxford English Dictionary (https://en.oxforddictionaries.com), human capital is defined as “The skills, knowledge, and experience possessed by an individual or population, viewed in terms of their value or cost to an organization or country.” Human capital is “the knowledge and skills that people acquire through education and training.” (Ziadat, 2015) Schultz (1961) considers human capital as a product with considerable investment and returns. It involves the perception that investments in people are conducted in such areas as education, training, and health. As a result, such investments are likely to increase an individual’s productivity (Goldin, 2015).

The term “human capital” was first used by Adam Smith in 1776, in his second book, *An Inquiry into the Nature and Causes of the Wealth of Nations.* Smith describes human capital as:

> “[…] the acquired and useful abilities of all the inhabitants or members of the society. The Acquisition of such talents, by the maintenance of the acquirer during his education, study, or apprenticeship, always costs a real expense […]. The improved dexterity of a workman may be considered in the same light as a machine or instrument of trade […].” (Smith, 2014)

Smith argues that people’s skills are a form of capital that can be developed through education, training, and continuous study. In turn, people may exchange their capital for wages and salary, and, in a larger sense, the human capital is to be used for the profit of an employer and of society. In this interpretation, human capital is considered as a fixed asset with a value that can be measured and quantified similarly as physical capital, such as machines and equipment (Smith, 2014).

4.6.2 Evolution of Human Capital

According to Iorgulescu (2015), human capital “became a concept of interest in the past six decades, starting with the 1958 Journal of Political Economy paper *Investment in Human Capital and Personal Income Distribution* by Jacob Mincer*”* (2015, p. 1844). Kern (2009), examining the evolution journey of human capital, contends Adam Smith brought a wave of the capitalist theory, including the division of labor, that influenced economics and the understanding of human capital. Smith is credited with being the first to make a connection between workers’ skills and the difference in their wages (Kern, 2009). Smith’s interpretation of human capital made it possible to quantify the value and estimate a numeric cost of each individual worker. According to Alan Fisher, in his 1939 paper on the stages of economic development, this view of human capability is useful in the secondary sector, or the secondary evolution of an economy. In the secondary sector, the extraction of raw materials (primary sector) and manufacturing (secondary) are the main sources of production. In these economies, human capital is a fixed asset that can be quantifiable, and it becomes possible for employers to account for the cost of their workforce and for governments to account for the cost of losses in human lives to war or disease (Fisher, 1939).

According to Goldin (2015), the term of human capital’s earliest formal use in economics was likely by Irving Fisher in 1897. Later the term was adopted by various

researchers and writers but did not become prevalent within economics until the late 1950s. It became popular after Jacob Mincer's 1958 article in the Journal of Political Economy, titled *Investment in Human Capital and Personal Income Distribution.* Gary Becker, in 1964, contributed to the term's popularity via his article titled *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*, which was preceded by his 1962 article, titled *Investment in Human Capital* in the Journal of Political Economy.

In 1961, Theodore Schultz (1961) reintroduced human capital to include schooling, apprenticeship, and the role of knowledge in the economy. However, Schultz considers employees' costs of obtaining education only if the knowledge contributed directly to their productivity at work (Perepelkin, Perepelkina, & Morozova, 2016). The importance of the concept of human capital started to appear by Schultz's article *Investment in human capital* in 1961, in which he explains various economic anomalies. Some are easy to determine, such as why both migrants and students are disproportionately young. Some are more challenging, such as why the ratio of capital to income has decreased over time, what explains "residual" growth, and why Europe and Japan recovered so rapidly after World War II. Others are even more challenging, such as why labor earnings have risen over time and why they did not for much of human history (Goldin, 2015).

In 1962, Becker added to the understanding of human capital to include intangible qualities, such as habits and creativity, as differentiating factors in the production process. Notably, he adds other factors, such as health, values, and family, to the development of human capital, and extends human capital beyond the context of assets pertaining to the production of work and employment to a larger context of crime and punishment, labor policies, and family stability (Becker, 1993). Jacob Mincer (1974) moves a step further as he makes a connection between education and investments in human capital to increase a worker's wages. In a later study, Mincer and a colleague used that connection to explain the difference in the pay gap between women and men. Mincer and a colleague find that women are less likely to spend time attaining vocational training and education, and therefore are not as competitive as their male counterparts in the marketplace (Mincer & Polachek, 1978).

Human capital theory received its greatest push in the early 1990s, when Becker won the Nobel Prize in Economics for his work in valuating human capital and using it to explain crime and punishment, family ties, discrimination, and a large variety of human behavior (Becker, 1992). Human capital became a way of measuring and explaining economic growth in countries. Benhabib and Spiegel (1994) argued that human capital

has a positive correlation with a nation's total factor productivity (TFP), which generally determines the level of efficiency and effectiveness of the production inputs (Comin, 2012). Human capital is an intriguing subject that received much attention. Goldin (2015) states that "There is much that remains to be explored historically" (p. 84). Importantly, Schütt (2003) indicates that "educational expansion does contribute to output growth," and that connects with the next topic.

4.6.3 Human Capital and Entrepreneurship

Human capital, as a rule, is vital to ensure economic sustainability and consistency (OECD, 1998). Thus, OECD uses human capital as a metric for economic progress and development (2001). With the link between economic development and social prosperity, the OECD began to recommend human capital policies for governments to implement to develop economically and socially. The focus was on the promise of entrepreneurship to develop economies, and hence arose the need for policies that developed human capital to support entrepreneurship (Unger, Rauch, Frese, & Rosenbusch, 2011).

Some research has questioned that traditional approaches to human capital investments, such as education and training, are effective in introducing the skills that an entrepreneur requires for success (Davidsson & Honig, 2003). They supported formal education as a means of increasing the likelihood of an individual to "attempt to engage in any nascent activities" (p. 301). However, the authors (2003) found that it was not as effective in predicting "those who succeeded with a first-sale or a profitable venture," which were the measures they used to determine success (p. 301). Their attention went to entrepreneurship human capital investments, such as business classes or business model training, as a way of increasing entrepreneurship in a nation (Davidsson & Honig 2003). These methods did demonstrate a positive correlation between increased investment in entrepreneurship-specific human capital and an increase in nascent entrepreneurs' success (Davidsson & Honig 2003).

Studies such as Davidsson and Honig's (2003) on human capital become increasingly significant when researching the factors that lead to an entrepreneur's success. For instance, some researchers define success as the ability of an entrepreneur to secure outside funding, where venture capitalists' selection criteria for startups include management skills and experience (Unger et al., 2011). Another issue with the impact of human capital on entrepreneurship is that, in the traditional definition of human capital developed by Becker (1963), individual workers try to maximize their self-interest and invest in human capital to receive higher wages. Cassar (2006) found that after

individuals made the initial leap into entrepreneurship, higher human capital investments did have a positive correlation with growth and profits in their business compared to individuals who had invested less in their human capital. However, Cassar does not specify the nature of the human capital investment, i.e. general education vs. entrepreneurship-specific training (2006). Bosma et al. (2003) differentiate between three types of human capital, which are general, industry-specific, and entrepreneurship-specific. Additionally, they found that of all the human and social capital investments made into entrepreneurship, the most promising start-ups are created by individuals who have prior experience in starting a business and membership in a business association (Bosma et al., 2003). Both of these factors are not traditional (education and training) human capital investments.

Human capital has been found to make a difference in the likelihood of individuals discovering entrepreneurial opportunities (Ucbasaran, Westhead, & Wright, 2007). In their study, they criticize the focus of previous research on venture performance as an indicator of success, and state that there is a need to "disentangle the activities involved in the entrepreneurial process that can subsequently impact venture performance" (2007). Their study focuses on whether human capital impacts the likelihood of an entrepreneur discovering opportunities. The authors qualify that query by noting there is no definite evidence hinting to identify an opportunity leading to influence venture outcomes, and that being able to identify multiple opportunities may "select to pursue better quality opportunities with greater wealth creating potential because they have more opportunities to choose from" (2007). Although it is not covered in their research, they recognize that discovering opportunities does not occur in a vacuum as the ecosystem makes opportunities possible, and the individual's creativity—or human capital—also plays a role (Ucbasaran et al., 2007).

Human capital has demonstrated a positive overall impact on entrepreneurship (Becker, 2009). For more than three decades, entrepreneurship researchers have been interested in human capital relationships that include education, experience, knowledge, and skills (Unger et al., 2011). Governments and international organizations have been greatly impacted by human capital theory (OECD, 2001). Becker's aggregated view of human capital, as a combination of all knowledge, skills, experiences, traits, and even family traits, influenced the understanding of human capital, with subsequent scholars making connections between human capital and the economic development of nations. This trend soon impacted policies on where best to invest to quickly develop economies (1992).

The *Global Entrepreneurship Index 2018* report identifies 14 pillars (see Table 30) as the components for any entrepreneurship ecosystem. Human capital is one component that measures the entrepreneurs' educational and training levels, which may prepare them to move forward in business (Acs et al., 2017). Yet, the table indicates that Acs and his team (2018), in the subject report, identify 13 other pillars, which all address human capital, whether the need is for education, training, or skills polishing. For instance, identifying opportunities, having the right skills to start a business, calculating risk, building a network, using technology, entering new global markets, and raising funds all appear as measurement components when considering the health of an entrepreneurial ecosystem (Acs et al., 2017).

Table 30: The Global Entrepreneurship Index 2018

Component of the entrepreneurship ecosystem	**What does it measure?**
Pillar 1: Opportunity Perception	*Can the population identify opportunities to start a business and does the institutional environment make it possible to act on those opportunities?*
Pillar 2: Startup Skills	*Does the population have the skills necessary to start a business based on their own perceptions and the availability of tertiary education?*
Pillar 3: Risk Acceptance	*Are individuals willing to take the risk of starting a business? Is the environment relatively low risk or do unstable institutions add additional risk to starting a business?*
Pillar 4: Networking	*Do entrepreneurs know each other, and how geographically concentrated are their networks?*
Pillar 5: Cultural Support	*How does the country view entrepreneurship? Is it easy to choose entrepreneurship or does corruption make entrepreneurship difficult relative to other career paths?*
Pillar 6: Opportunity Perception	*Are entrepreneurs motivated by opportunity rather than necessity and does governance make the choice to be an entrepreneur easy?*
Pillar 7: Technology Absorption	*Is the technology sector large and can businesses rapidly absorb new technology?*

Pillar 8: Human Capital	Are entrepreneurs highly educated, well trained in business, and able to move freely in the labor market?
Pillar 9: Competition	*Are entrepreneurs creating unique products and services and able to enter the market with them?*
Pillar 10: Product Innovation	*Is the country able to develop new products and integrate new technology?*
Pillar 11: Process Innovation	*Do businesses use new technology and are they able access high-quality human capital in STEM fields?*
Pillar 12: High Growth	*Do businesses intend to grow and have the strategic capacity to achieve this growth?*
Pillar 13: Internationalization	*Do entrepreneurs want to enter global markets and is the economy complex enough to produce ideas that are valuable globally?*
Pillar 14: Risk Capital	*Is capital available from both individual and institutional investors?*

Source: Global Entrepreneurship Index, 2018

There is strong evidence that economic growth is linked with human capital (Becker, 2009; Goldin, 2015; Schütt, 2003). Germany and Japan, for instance, overcame the aftermath of World War II due to highly skilled, knowledgeable, educated, and healthy human capital (Becker, 2009). According to the Human Capital report of 2016 by the World Economic Forum, business has a critical role in increasing investment in education and clearly describing desired curriculum outcomes. As today's economies are more knowledge-based, technology-driven, and globalized, the idea of a one-time education providing people with a lifelong skillset is a remnant of the past (World Economic Forum, 2016).

4.7 Signalling Theory and Entrepreneurship Education and Training

Recently, the signalling theory started to gain attention in management studies, and evidence in the literature explains that the theory is linked to entrepreneurship, which we will address later in this section. The use of the signalling theory in this research is not to compare or compete with the human capital theory, which Kjelland (2008) did in his paper titled *Economic Returns to Higher Education: Signaling v. Human Capital Theory an Analysis of Competing Theories*. Instead, the signalling theory is more likely to act as an

addition and an important complementary item within the conceptual framework of this research.

4.7.1 Introducing Signalling Theory

The signalling theory works on understanding the communication behavior and rationalizing signal contexts within species, and it is used in both human and non-human settings (Bergstorm, 2006). According to Kiejmann (2012), signals have been tested in modern times by Thorstein Veblen, who in 1899 introduced his theory of the “leisure class”; Marcel Mauss, who in 1924 tested signals regarding religious issues; and Norbert Elias, who in 1939 wrote about the civilizing process. In terms of two applications of the signalling theory, Amotz Zahavi is well known in biology and Michael Spence in job markets (Diekmann, 2012).

The signalling theory gained the attention of many researchers to the extent that it is being used in a wide range of research fields, such as in “biology, economics, sociology, anthropology, political science, communication studies, linguistics, philosophy, and psychology” (Bergstorm, 2006). Riley (2001) states that for more than two decades, this theory has developed significantly and added many applications.

The signalling theory states that downgrading the level of information asymmetry between concerned parties within a specific interest is a vital issue toward success (Connelly et al., 2010). This success is likely to be the result of better human understanding of signals, according to Richard Dawkins (1978). This evolution, according to Kjelland (2008), is likely to bring confidence and to stem from additional education, which is a matter related to this study.

4.7.2 Signalling Theory and Information Asymmetry

Under the framework of the signalling theory, information asymmetries occur when “different people know different things” (Stiglitz, 2002, p. 469 in Connelly et al., 2010). Thus, information asymmetries occur as one party holds the information while the other party that is supposed to make a decision does not have it (Connelly et al., 2010). According to Connelly et al. (2010), the signalling theory is basically “concerned with reducing information asymmetry between two parties,” which is a fundamental concern that credit rationing theory addresses regarding the relationship between lenders and borrowers. For instance, investors, during their due diligence process, investigate the entrepreneurs’ or SMEs’ actual financial performance or at least their projections.

The signalling theory can help here to identify any possible gaps as it concerns "the relationship between a firm's financial leverage and cash flow under asymmetric information" (Zhao, Katchova, & Barry, 2004). According to Spence (1973), a rich discussion, by such researchers as Leland and Pyle (1977), Ross (1977), Talmor (1981), Bhattacharya and Heinkel (1982), Rennan and Kraus (1984), Harris and Raviv (1985), Poitevin (1989), and Bhattacharya and Dittmar (1991), was exploring this point in the capital market. Zhao et al. (2004) say that the costly signalling equilibrium in information can be detected if "the production of the signal consumes resource(s) or if the signal is associated with a loss in welfare generated by deviations from allocation or distribution of claims in perfect markets" (p. 7). For instance, high and low debts and stock purchases are signals that can reflect specific positioning of a firm, according to Zhao et al. (2004).

4.7.3 Signalling Theory and Entrepreneurship

Connelly et al. (2010) state that the signalling theory, in addition to its presence in management literature, has other applications in areas including entrepreneurship and human resource management (p. 39). Connelly et al. (2010) mentioned in their intriguing paper titled *Signaling Theory: A Review and Assessment* that the signalling theory is being used regularly to examine issues under the framework of entrepreneurship. For instance, Backes-Gellner and Werner (2003) identify severe problems in credit and labor markets that innovative German entrepreneurs and start-ups face due to information asymmetries. Backes-Gellner and Werner (2003) applied the signalling theory to study the entrepreneurial signals that may help these innovative entrepreneurs and start-ups to succeed. They found that an educational degree and what they call "Studying Fast" are among the most important factors toward helping those entrepreneurs overcome the information asymmetry challenge and succeed with their market partners (Backes-Gellner & Werner, 2003). In another case study, Robson et al. (2013) found that "quality signal of prior business ownership experience […] reduced the propensity of entrepreneurs to report being credit-rationed entrepreneurs," with human capital playing a significant role in helping such entrepreneurs succeed (p. 367–368).

In another field of application for the signalling theory under the entrepreneurship framework, Hefti and Levie (2014) used the theory to explore entrepreneurial leadership where the theory led to entrepreneurial leaders sending credible signals to themselves, their co-founders, and key stakeholders outside their organization. In technology-based SMEs, Goines and Miralles (2015) used the signalling theory to explore "beyond the resources to explain the weight that entrepreneur's actions carry on the technology

entrepreneurship process" (p. 39). They concluded that to reach the desired impact, "entrepreneurs strategically use market, technology, and social capital signalling to mitigate uncertainty and advance in the technology entrepreneurship process" (p. 39).

A final example of the signalling theory's application is on how to help small firms reach buyers in international markets through utilizing online technologies. The study was conducted by Reuber and Fischer, who applied the signalling theory to gain "insights about signalling in online markets for managers developing reputation-building strategies" (Reuber & Fischer, 2009, p. 369).

4.8 Entrepreneurship Education and Training

Entrepreneurship education and training is a subject that is part of the theoretical foundation of this research. Entrepreneurs and SMEs still face the challenge of access to finance in what is known as credit rationing, which has causes including information asymmetry and entrepreneurs' characters and skills. Human capital appears in literature as a main channel to improve the entrepreneurs' competencies and qualifications to better deal with investors in obtaining financing. This target is likely to be achieved through education and training. Consequently, the study needs to visit the topic of entrepreneurship education and training to identify potential buffers of support for the research questions at a later stage of this study.

4.8.1 Significance and Evolution of Entrepreneurship Education and Training

According to the Entrepreneurship Development Institute of India, the birth of entrepreneurship education and training was in the West, and it came as a result of the urgent need to reconstruct some parts of Europe and its economies after World War II. At that time, the main focus was on exploring "practical measures to augment the supply of entrepreneurs" (Entrepreneurship Development Institute of India, 2009). There was a need to help those identified entrepreneurs to start their own ventures by developing their capabilities. Accordingly, entrepreneurship education and training programs were established for this purpose (2009).

Entrepreneurship education, as an academic discipline, is still considered new (Unachukwu, 2009). As a definition, it is "all activities aiming to foster entrepreneurial mindsets, attitudes and skills and covering a range of aspects such as idea generation, start-up, growth and innovation" (Fayolle, 2009). Thus, the purpose behind

entrepreneurship education is to prepare individuals to entrepreneurially think, act, and manage their ventures, focusing on the knowledge needed to conceive and commercialize business opportunities (Unachukwu, 2009). Khan (2011) states that entrepreneurship education, like venture capital and incubators, is significant in driving economic growth forward.

4.8.2 Classification of Entrepreneurship Education and Training

Fairlie and Holleran (2012), in their study on entrepreneurship education and training based on evidence from a random experiment, concluded that “we know relatively little about the effectiveness of these types of programs” (p. 377).

Attempting to form a clear, holistic picture of entrepreneurship education and training programs, Weber (2012) developed a simple classification system. According to Weber (2012), entrepreneurship education programs fall into four specific categories in terms of concepts and advancement levels as displayed in Table 31. The first type is *Entrepreneurial Awareness Education,* which aims to help individuals learn about entrepreneurship, self-employment, and small businesses. The second type, *Education for Start-ups,* aims to help individuals with entrepreneurial intentions. This category is targeted at entrepreneurs who are building conventional businesses. The third type is *Education for Entrepreneurial Dynamism,* which aims to help entrepreneurs who have passed the start-up phase to acquire knowledge on strategies to expand their businesses. The fourth type, *Continuing Education for Entrepreneurs,* aims to help professional entrepreneurs. According to Weber (2012), this type of entrepreneurship education is defined as adult training to further develop the entrepreneurs to advance their abilities on the personal and leadership levels.

Table 31: Types of entrepreneurship education

Kind of Entrepreneurship Education	Objective	Target Audience
"Entrepreneurial Awareness Education"	Build new entrepreneurs through deliver knowledge focusing on small businesses, self employment and entrepreneurship	Individuals
"Education for Start-ups"	Prepare individuals to own conventional businesses	Individuals with entrepreneurial intentions
"Education for Entrepreneurial Dynamism"	To help entrepreneurs acquire knowledge on strategies to expand their businesses	Entrepreneurs who passed the start-up phase
"Continuing Education for Entrepreneurs"	Adult training to further develop entrepreneurs abilities	Entrepreneurs

Source: Weber (2012)

Valerio et al. (2014) identified the same ecosystem but with more elaboration in terms of categories of entrepreneurs and targeted audiences. As illustrated in Table 32, Valerio et al. (2014) distinguished between entrepreneurship education and entrepreneurship training, where education is dedicated to higher education students (undergraduates and graduates). The training part is composed of two categories, potential and practicing entrepreneurs. The potential entrepreneurs' category includes such individuals as vulnerable, unemployed, innovative-led, and opportunistic entrepreneurs. The practicing entrepreneurs category includes micro- and small enterprise owners and high-growth potential enterprise owners (Valerio et al., 2014).

Table 32: Entrepreneurship education and training

Type	Category	Target Audience
Entrepreneurship Education	Secondary Education Students	Higher Education Students (Undergraduate and Graduate)
Entrepreneurship Training	Potential Entrepreneurs	Vulnerable, unemployed, or inactive individuals Innovative-led or opportunistic potential entrepreneurs
	Practicing Entrepreneurs	Informal or micro and small enterprise owners High-growth potential enterprise owners

Source: Valerio et al. (2014)

4.8.3 Potential Buffer to Enhance Entrepreneurship Education and Training

There was always a concern that something is missing or incomplete in these entrepreneurship education and training programs (Achard, 2010). To that extent, Morris (2014) questions whether universities are capable of helping students to become entrepreneurs and build their ventures. Although the purpose of entrepreneurship education and training is to foster skills and attitudes of entrepreneurs toward success in starting their ventures, ((Nkirina, 2010, p. 157) trained entrepreneurs still find it difficult to start their business (2014). Johannisson (1992) went further by stating the situation of entrepreneurship education and training is “inappropriate” (p. 5).

Despite the evolution occurring in entrepreneurship education and training, concerns remain on its effectiveness and efficiency. Kelley and Thomas (2011) say that many countries worldwide suffer entrepreneurship training deficiencies. For instance, on entrepreneurship education in Asia, they state that “we know little, if anything about what is taught in the entrepreneurship training programs” (p. 101). The World Bank agrees on the concern with more attention on such variables as the nature of venture sizes and the nature of participants Valerio et al. (2014). In the developing countries, including Saudi Arabia, Khan (2011) expressed his concerns and referred to the type of design, structure, and components of knowledge that entrepreneurship education programs should contain. Examples of potential deficiencies are the nature of context and content, poor technical skills learning, and the education and training entities’ resistance to transformation (I. M. Khan, 2011).

4.8.3.1 Nature of Context and Content

The nature of entrepreneurship education is counted as a deficiency due to debates on contents and contexts based on the changes occurring in the world of business, according to Khan (2011). While some theoreticians argue that entrepreneurship programs should focus on “rigourous discipline-based education” (Brush, Duhaime, Gartner, Stewart, Katz, Hitt, Alvarez, Meyer, & Venkataraman, 2003a, p. 317), others recognize that the field needs “professional education in line with other fields in business” and should benefit from specific training “to foster conditions for new ventures and for the strategic expansion of regional SMEs” (Rasmussen & Sørheim, 2006, p. 187). Entrepreneurship education and training programs and their firms, away from the considerable ambiguity of a long and continuing debate on whether entrepreneurs are

born or made, started to gain attention through questioning their qualities in terms of objectives (Bechard & Toulouse, 1998, p. 317), especially with the confusions and complexity of the new business environment (Johannessen & Olsen, 2003).

Henry et al. (2005) question if entrepreneurship can be taught or not, which is, again, a debatable issue. However, they, as active researchers in the field, reached a finding that the attention is only on teaching the art and the science of entrepreneurship with some success in this endeavor. An example here is David Kirby (2004), in his argumentative article on whether business schools can meet the challenge of providing better entrepreneurship education. Despite identifying the problem being faced, he focuses on developing entrepreneurs' characteristics and roles more than anything else toward enhancing entrepreneurship education (pp. 501-510). Examining the issue from a different angle, a study conducted at the University of Illinois at Chicago found considerable evidence that business plan formulation through business simulation is a better learning method that demonstrates positive results in entrepreneurship students (Gartner & Vesper, 1994, p. 179). Additionally, a study conducted in Norway supported the finding, determining that entrepreneurship education in Norway is giving less attention to classroom education and more to "learning-by-doing." The authors call it an "action-based entrepreneurship education program" (Rasmussen & Sørheim, 2006, p. 185).

4.8.3.2 The Need for Practical Knowledge and Skills Learning

A common issue found across entrepreneurial education and training programs globally is that they include "a set of empirical generalizations about the world, economy, and how entrepreneurs should behave that allows for the prediction of true outcomes" (FIET, 2000). Another common understanding is that "if individuals can be selected and trained, this implies there are ways to increase entrepreneurial inputs which are important to determining economic growth" (Leibenstein, 1987, p. 198). The technical skills learning, within entrepreneurship education and training, is a concern. Unachukwu (2009), in his interesting article discussing issues and challenges on this subject in Nigeria, associated entrepreneurship education with a set of activities focusing on technical skills such as controlling resources and managing people. Unachukwu (2009) also explains to that entrepreneurs should have the ability to cooperate with others within the boundaries of the skills they have learned during running their venture.

Practical knowledge is important, which is apparent from the number of investors who started to contribute to literature by offering their own thoughts and experiences in books dedicated to potential entrepreneurs. For instance, how to deal with angel investors is one of these subject areas. A book titled *Cash Crash Course: Angel Funding* (Poland & Bucki, 2013) is dedicated to entrepreneurs starting their ventures. The book helps entrepreneurs to understand some technical financing issues in the format of questions and answers, such as "what startup equity is," "build our first formal board of directors," and "how to divide the ownership" (pp. 90–91). On a practical basis, another book appears to be trying to help entrepreneurs find whom to deal with. For instance, Cox (2010) in his book titled Funding *Innovation in Young Firms,* explores how an entrepreneur should select the right investor based on the nature of the venture.

In terms of funding, a book titled *Venture Capital Funding* by Stephen Bloomfield (2008) advises entrepreneurs how to ask themselves what is the right funding for them and how to identify it (pp. 215–221). Even in crowd funding, which is considered to be a new concept, some educational materials have started to appear, such as a book titled *Crowd Funding Made Simple* (Adams, 2013). The book's objective, according to the author, is to help entrepreneurs pursue funding via this financing vehicle as it was noted that most projects do not reach their funding goals. The book explains in detail about the financing vehicle, the steps to communicate with investors and make a pitch, and even how to develop a strategy to communicate via social media.

On the traits level, investors would clearly like to see certain traits in entrepreneurs, such as passion. Cox (2010, p. 89), in his book titled *Funding Innovation in Young Firms,* presented a statement of an interviewee, who was an investor, saying that real entrepreneur drive is not financial. Such entrepreneurs work on meeting large goals and over time, they will succeed. Investors offer this mindset serious consideration.

From the above examples, it appears that practical learning is needed. Johannisson (1992) believes that entrepreneurship is "action learning." Thus, he suggests that entrepreneurship training should be integrated with what he calls "the everyday business operations" providing the right experience, which is close to actual cases (p.5). Johannisson (1992) focuses on building the competencies of self-confidence and the entrepreneur's personal networking. He proposes that the entrepreneur should be provided with self-organized learning more than planned entrepreneurship training.

4.8.3.3 Resistance to Transformation

The three main concerns facing entrepreneurship education and training institutes that are likely to stand in the way of a higher impact are transformation, faculty quality, and collaboration with professional business institutes.

Researchers have raised the question of whether the organizations providing entrepreneurship education and training notice the gap yet resist transforming their programs for one reason or another. Although both academic and business organizations that may join efforts to train entrepreneurs are “capable of revitalizing both the local and national economy,” (Bechard & Toulouse, 1998, p. 318) Hannan (2005) states that such institutes, mainly universities, usually resist the change. Supporting Hannan’s perspective, Fayolle (2006) of the EM Lyon Business School indicates that only a small number of universities in Europe transformed, yet in the field of entrepreneurial policies for their faculties they are not likely to go beyond an entrepreneurship chair or an entrepreneurship center. Even in regard to teaching methods, the case does not reveal more than traditional lecturing, and, in many cases, these lectures in entrepreneurship are elective courses (Fayolle, 2006). The situation is the same in different areas around the world, such as in Brazil, where Lima (2012) noted that very few studies on improving entrepreneurship education have been conducted.

The second concern is faculty competencies. Fayolle (2009) suggests there is a need to revisit and evaluate entrepreneurship education and training as there is a lack of qualified faculty to teach entrepreneurship. In terms of delivering knowledge, MartÍnez et al. (2010) indicate that most practitioners and theorists alike agree that experiential learning is the most effective form of developing entrepreneurial skills. However, the influence of entrepreneurial training on learning, and the strategies necessary for successful enterprise growth, are still lacking (MartÍnez et al., 2010).

The third concern is collaboration with professional business organizations. Entrepreneurial education research and practice should not be restricted to academic institutions alone but should collaborate with organizations that foster entrepreneurship. The performance of organizations is akin to the modes of exploitations that entrepreneurs use (Zahra, Korri, & Yu, 2005, p. 132) and promotes the use of action-based models that provide access to knowledge and networks related to the opportunities in the regional context (Rasmussen & Sørheim, 2006, p. 191). Business organizations have replaced educational institutions in determining which skills, opportunities, and knowledge will impact entrepreneurial ventures. While the role of public institutions has been thoroughly

reviewed in entrepreneurship literature, the relationship between entrepreneurs and decentralized institutions has been left widely unexplored (Meek, Pacheco, & York, 2009, p. 496). Studies of distributed collaboration and knowledge-sharing among organizations demonstrate how communities of practice can enhance communications, improve organizational performance, and support collective goals (Carayannis, Popescu, Sipp, & Stewart, 2006, p. 424), which is relevant to the case study of Saudi business organizations and their entrepreneurial support program.

4.8.3.4 Recommendations to Enhance Entrepreneurship Education and Training

Kelley and Thomas (2011) support future research in assessing entrepreneurship education and training programs' qualities because regardless of the efforts, entrepreneurs being trained are still not able to start their own businesses due to constraints such as access to financing, human capital, and business knowledge. Entrepreneurship education is still struggling to make a strong impact on developing countries' economies as it is poorly inserted into their training systems (Nkirina, 2010, p. 153). Thus, Hill and Leitch's (2005) perspective that there is a need to reevaluate the available entrepreneurship education and training programs in terms of effectiveness, as this issue required little attention in the literature to understand what is to be achieved from and through such programs. Fairlie and Holleran (2012) mention that entrepreneurship education and training programs should focus on teaching how to remove barriers for entrepreneurs as a way to potentially foster high growth and job creation ventures (p. 378).

This fine-tuning of education and training programs may help entrepreneurs gain the knowledge to prevent them from presenting faulty business plans or communicating poorly with investors as entrepreneurs may be not aware of "how, by whom and with what consequences opportunities to produce future goods and services are discovered, evaluated and exploited" (Acs, Braunerhjelm, Audretsch, & Carlsson, 2008, p. 15). In summary, a transformation is required for entrepreneurship education and training in terms of what and how (Kirby, 2004). Many writers, such as of Fairlie et al. (2012), Fayolle (2009), Henry et al. (2005), Lima (2012), and Nkirina (2010), support reevaluating the available entrepreneurship education and training programs mainly for their effectiveness. A potential buffer of enhancement exists in this regard, mainly on issues such as human capital and access to finance (Fairlie & Holleran, 2012). Other realistic

subjects include “administration and governance, marketing and sales and corporate strategy” (Parker & van Witteloostuijn, 2010, p. 204).

4.9 Summary

The objective of this chapter is to identify the theoretical foundation for the proposed study. Access to finance exists as a challenge for entrepreneurs due to what is known as credit rationing. Based on literature, the main reasons for credit rationing are information asymmetry, entrepreneurs’ character, and entrepreneurs’ skills, which suggests a potential buffer of improving entrepreneurship education and training to help entrepreneurs to succeed in obtaining financing.

To clearly identify the theoretical foundation of the study, we needed to examine the definition of the entrepreneur, which is evolving in literature. Next, the credit and financing for entrepreneurs and SMEs was explored to highlight the challenges that entrepreneurs and SMEs face in the credit market with both its money and capital markets. The primary challenge is credit rationing. Then, the causes of credit rationing were explored, such as the main one of information asymmetry—which has long existed in both developed and emerging economies, entrepreneurs’ character, and entrepreneurs’ skills, as evidence exists that they play a major role in credit limitations.

Human capital appears as a direct and related subject to address to eliminate credit rationing as it includes education, experience, knowledge, and skills. Human capital is most likely to be the focal point of the theoretical foundation, as it has demonstrated a positive overall impact on entrepreneurship. From this point and to support the decision to consider human capital as the main theory of the theoretical foundation of the study, we needed to explore the theory, its evolution journey, and its linkage to entrepreneurship. Next, the author looked at the signalling theory, as it appears in literature to have a strong link with both entrepreneurship and information asymmetry, which is a reason for credit rationing. The signalling theory is a significant supporting theory within the theoretical framework that needed to be visited within this chapter.

The author moved forward to examine entrepreneurship education and training in a holistic perspective to identify potential gaps to be bridged. Three main subjects were explored in this part: the significance and the evolution of this area, the classification of entrepreneurship education and training programs, and the potential buffer to enhance entrepreneurship education and training. The output of this chapter links to the next chapter toward outlining the research questions and framework of this study.

CHAPTER FIVE: RESEARCH QUESTIONS AND METHODOLOGY

5.1 Introduction

This fifth chapter has three main objectives. First is to identify the research question and sub-questions. Second is to identify the conceptual framework of the research based on the theoretical foundation that was explored in the previous chapter. Third is to identify the methods used to collect the needed data. In addition to this short introduction, this chapter includes the following sections: (1) the research main question and sub-questions, (2) conceptual framework of the study, (3) research methodology and design, (4) sample population, (5) instruments, (6) piloting, (7) ethical considerations, (8) scope and limitations, and (9) summary of the chapter.

5.2 Research Questions

Within credit rationing, three major constraints—information symmetry or imperfect information, entrepreneurs' character, and entrepreneurs' skills—are linked to human capital. They are likely to contribute in investors' reluctance to consider financing entrepreneurs. Applied to Saudi Arabia, the Kingdom has many active entrepreneurship education and training programs, but their output is deficient in the stage of financing entrepreneurs. This researcher argues that there is a need to address the problem by having a dedicated training module focusing on helping entrepreneurs deal with investors for a higher likelihood of obtaining funding. Based on the above, the title of this research, which contains the main research question, is:

> **"Aligning the appeal of entrepreneurs to investors: Why there is a need for an optimal entrepreneurship training program in the Kingdom of Saudi Arabia to better engage entrepreneurs with investors"**

Consequently, the main research question is: Why is there a need for an optimal training module to better engage entrepreneurs with investors who are considering financing their ventures? Derived from the main question, the sub-questions that the research examines are the following:

1. What additional knowledge do entrepreneurs need to learn to be more attractive to investors?
2. What additional knowledge do entrepreneurs need to learn to make their ventures' concepts more attractive to investors?

3. What additional knowledge do entrepreneurs need to learn to make their business plans more attractive to investors?
4. Do entrepreneurs need to better learn how investors conduct their due diligence to prevent the problem of imperfect information?
5. Is the quality of the current entrepreneurship education and training programs in Saudi Arabia acceptable for preparing entrepreneurs to connect with investors to obtain financing to establish their ventures?
6. What can investors do to help entrepreneurship education and training institutes better prepare entrepreneurs for engaging with investors on financing?

5.3 The Conceptual Framework of the Research

This researcher identifies the knowledge and understanding of the case through synthesizing the different pieces of the theoretical foundation and mapping it into a conceptual framework. This framework is likely to exhibit how research questions will be answered toward reaching an output. Thus, it is important to focus on the value of the conceptual framework as a concept.

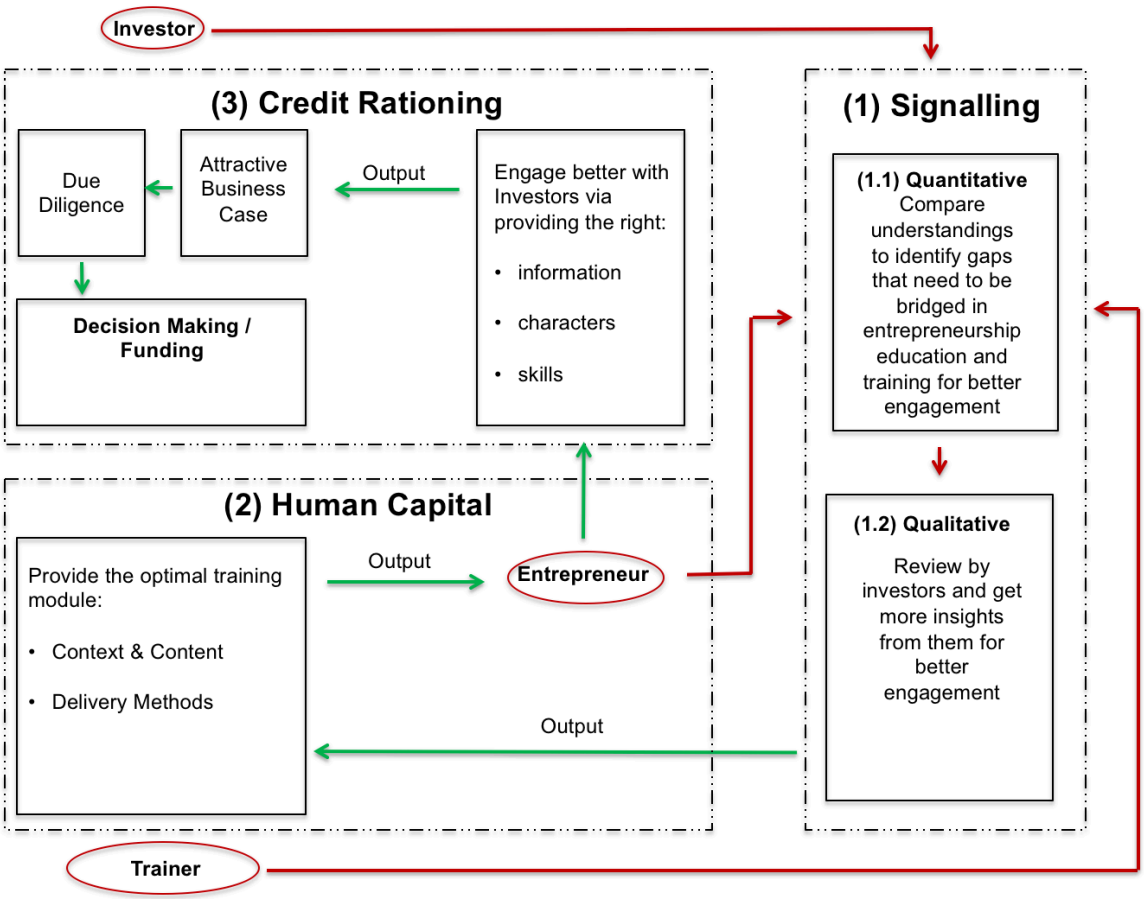
Sinclair (2007) considers a “theoretical framework” and a “conceptual framework” as the same and are likely to be used interchangeably, which may confuse some people. Jabareen (2009), of Israel Institute of Technology, explains that the “current usage of the terms conceptual framework and theoretical framework are vague and imprecise” (p. 50). Thus, in his article titled *Building a Conceptual Framework: Philosophy, Definitions, and Procedure*, Jabareen (2009) focuses on “the process of building conceptual frameworks for multidisciplinary phenomena linked to different bodies of knowledge” (p. 50). In this context, Jabareen (2009) defines the conceptual framework as “a network […] of interlinked concepts that together provide a comprehensive understanding of a phenomenon or phenomena” (p. 50). In terms of significance, Maxwell (2013) says that a conceptual framework, which is a “something that is constructed, not found” (p. 41), is a key element of a research design as it “shows the research problem” (p. 39). Simply, it is journey map, as Sinclair (2007) defines it, “toward an endpoint—to develop new knowledge that will contribute to practice” (p. 39).

A conceptual framework communicates the routes by which “an intervention is expected to cause the desired outcomes” and reveals the specific elements to assess in the study (Bertrand, 2006, p. 4). Thus, when producing a product, for instance, the conceptual framework “enables a systematic identification of the important product

characteristics that need to be delivered" (Madrid, Söderberg, Vallhagen, & Wärmefjord, 2016, p. 686). This concept supports the current research as there is a potential product to propose, which is an optimal training module that may help entrepreneurs to better deal with investors toward a greater chance of financing.

Consequently, the conceptual framework of this research (see Figure 28) illustrates that to resolve the challenge of credit rationing, human capital is the path to it as literature states and mentioned previously in chapter 4. However, to know what knowledge is needed to feed entrepreneurs for their communication with investors, it is important to utilize the signalling theory in identifying what investors are seeking in the entrepreneur and the venture. Here, the signals that will be collected are from three categories of respondents: investors, entrepreneurship training subject matter experts, and entrepreneurs.

Figure 28: The Conceptual Framework Map of the study



5.4 Research Methodology and Design

Research methods are “techniques and procedures used in the process of data gathering” (Cohen, Manion, & Morrison, 2017, p. 47). Creswell (2003), Bryman et al. (2007), and Cohen et al. (2007) explain that quantitative, qualitative, and a mixture of both techniques are three known research methods. Using any of these techniques and procedures depends, in the first place, on issues such as type of the study, type of sample population, type of questions, and variables of the information needed (Cohen et al., 2003; Creswell, 2007; Bryman et al., 2007; Gay & Airasian, 2003).

The nature of this research and its outcomes are highly relevant to be identified “a two-phase mixed method” as defined by Creswell et al. (2007, p. 71). Using both quantitative and qualitative methods in data collection is useful, as a questionnaire can be used to collect data that can be presented to a group of interviewees to gain deeper understanding (Gay & Airasian, 2003). The researcher selects such a design to identify robust and new knowledge toward the credit rationing dilemma that entrepreneurs face when dealing with investors in Saudi Arabia. Thus, the study presents initial quantitative data results, which is the first phase of the study, to a set of professional individuals in the SMEs investment and funding industry to elaborate on it.

The qualitative part is the second phase of the study. According to Gartner and Biley (2002), it is important to go beyond providing an explanation of a concept to develop a theory that may explain the “why” of the studied phenomenon. Such a design suits the research as it “needs qualitative data to explain significant (or nonsignificant) results, outlier results, or surprising results” (Morse, 1991 in Creswell et. al, 2007, p. 72). Based on this model, which is a follow-up explanatory model as Creswell et al. (2007) identify it, the research output is more likely to lead to framing a high-level optimal training module that may contribute to educating entrepreneurs in dealing with investors toward financing.

Discussing the procedures by which the author collected and analyzed data, the study will have two parts as mentioned above. First is the quantitative side of the study. Here, the research’s methodology proposes to explore the current status of entrepreneurial training through identifying the gaps in answers between entrepreneurs, investors, and training experts in Saudi Arabia. The areas covered include five main categories. They are: (1) dedicated questions to each respondents’ group to identify the key features that investors seek in entrepreneurs, (2) the attractiveness of the entrepreneur to the investor, (3) the attractiveness of the venture to the investor, (4) the attractiveness of the business plan to the investors, and (5) the due diligence that investors conduct, but this area is

dedicated to entrepreneurs who claim that they know what due diligence means. Quantitative research, regardless of how easy to conduct and measure, does not necessarily lead to reaching deep information or knowledge about the research subject (Cohen et al., 2007).

The second part of the study is the qualitative side, where the aim is to “develop concepts which enhance the understanding of social phenomena in natural settings” (Neergaard & UlhØi, 2007, p. 4). Via the qualitative method, deeper information can be reached, which may complement the quantitative part in reaching a clearer picture on the researched subject (Cohen et al., 2007; Bryman et al., 2008). Rubin et al. (2011, p. 16) provides a higher weight for interviewing subject matter experts in the qualitative work. Thus, the researcher relied on interviewing a set of subject matter experts. The researcher conducted qualitative interviews (face-to-face interviews or telephone calls when the physical meeting was not possible) with a set of subject matter experts in the field of entrepreneurs and SMEs development financing. The purpose of the interviews is to exhibit the survey results and obtain the interviewees’ opinions on the findings and insights. This set of interviewees, who are investors by profession, most likely will strengthen our study construction. These investors also can add value towards the need for an optimal training module or program to align the entrepreneurs with investors, vis-à-vis in success rate of obtaining funding.

5.5 The Sample Population and Size

5.5.1 Sample for the First Part of the Study

Concerning the first section of the study, which is the quantitative part, there are three categories of respondents: entrepreneurs, investors, and training experts. The sample size is a critical issue for validity and even for the potential of generalizing the results on the population (Gay & Airasian, 2003; Cohen et al., 2007; Bryman et al., 2008). Bryman et al. (2008) focus on two points. First, it is better to obtain a larger response in a smaller sample rather than a smaller response in a larger sample. Second, they stress that validity in survey design is of higher value than validity in population sample size. Crowl (1996) indicates another important point, which is that a quality sample is more important than its size.

All categories will be asked the same questions, except for the dedicated questions. The first category is the entrepreneurs. Their answers will contribute in identifying where gaps exist when compared with investors’ answers. The respondents in this category are

expected to be the largest in number when compared with the other two categories. The second category is the investors, who are considered to be the core element of participants in this study as the research argues that entrepreneurship training should align with investors' practical requirements when entrepreneurs approach them. This group is expected to be limited in number. The third category consists of those who are involved in entrepreneurship education and training, such as instructors, mentors, programs designers, and training center managers. This category is also expected to be limited in number, based on the researcher's experience during the process of mapping the entrepreneurship education and training institutes in the Kingdom. Contacting them was a challenge to the researcher.

5.5.2 Sample for the Second Part of the Study

In the second part of the study, which is the qualitative part, the researcher interviewed a specific group of subject matter experts from the SMEs investment industry. While mapping the ecosystem in Saudi Arabia during the literature review, the researcher faced a significant challenge in meeting investors or even responding to emails or telephone calls. Thus, the size of the sample population of investors, which is completely different from the ones who will respond to the survey, is small. However, this factor is rationalized in literature. Jette et al. (2003, pp. 224-236) say that considering respondents who are subject matter experts is an important factor to reduce the number of respondents needed in a qualitative research study. Mason (2010) says that frequencies are not that significant in qualitative studies, as using more data does not necessarily lead to having more information. Mason (2010) came to this conclusion based on studying 560 qualitative types of Ph.D. dissertations. In qualitative research, a researcher is concerned with "meaning and not making generali(z)ed hypothesis statements," Mason says (Mason, 2010).

Considering the concept of saturation in terms of determining the sample size in qualitative research, Charmaz (2006, p. 114 in Mason, 2010) says that a study adopts a modest claim when it is small. Consequently, saturation can be achieved quickly. Mason (2010), in his literature review, found some references that provide clear guidelines on sample size, as illustrated in Table 33. He applied these guidelines in studying the 560 Ph.D. theses. Mason (2010) found that 80% of the studied PhD theses meet the Bertaux guideline, which states 15 responses as a minimum, and 68% of the total fall within the Creswell guideline of five to 25 responses as a sample size.

Table 33: Sample size guidelines in qualitative studies per Mason (2010)

Study Type / Field / Nature	Researcher / Reference	Suggested Sample Size
Ethnography and ethno science	MORSE (1994, p.225) BERNARD (2000, p.178)	30-50
Grounded theory methodology	CRESWELL (1998, p.64) MORSE (1994, p.225)	20-30 30-50
Phenomenology	CRESWELL (1998, p.64) MORSE (1994, p.225)	5-25 At least 6
All qualitative research	BERTAUX (1981, p.35) adapted from GUEST et al., 2006 Charmaz (2006, p.114)	15 Minimum 25 is adequate

In terms of selection criteria in identifying the sample population for this project, the researcher first relied on making sure of having a diversified set of a limited number of interviewees. The respondents are from four major entrepreneurship and SMEs financing communities: venture capital/private equity, debt loan, angel investment, and financial studies and consultancy. The interviewees have been well known in the entrepreneur financing business over a long period of time, and they are based in major cities in the Kingdom.

Second, the researcher believes that Dundon's perspective (2009) is worth consideration in this part of the study. Regardless of how well designed and planned interviews are, in many cases they may fail to produce evocative data, especially on business-related topics. One limitation considered by the researcher is that interviewees may withdraw because of business commitments or a busy schedule. As illustrated in Appendix 1, the selection of these participants is based on three main considerations. First, these participants are well known with high credibility. Second, the researcher adopted the advice of Glass (1997, p. 85) by selecting participants who are reasonably capable and objective. Third, the participants are among a larger set of subject matter experts who know the researcher on a professional level, which helped the researcher to conduct the interviews in a comfortable and flexible timeframe with minimal surprises and costs.

5.6 Instrumentation

5.6.1 Web-Based Survey Tools

The intention and the decision were to use a web-based survey. The decision was based on two main reasons. First, the researcher faced difficult challenges while communicating with respondents, which indicated to the researcher that using a paper survey is likely a risky way for obtaining answers. Second, the previous fears of using web-based surveys no longer apply with the recent advanced technology improvements. Web-based surveys' administrative problems, such as incompatibilities, usability problems, and programming errors, are concerns of the past but not present (Schleyer & Forrest, 2000). Additionally, cost is not an issue anymore as the electronic survey has proven to be the most efficient instrument.

The researcher assessed the most applicable survey tools on the internet. Based on the researcher's review and colleagues' recommendations, four leading names (Table 34) were considered: Google Forms, Fluid Surveys, Survey Monkey, and Zoomerang. Although each was acceptable for the researcher due to several tests[28] that proved to be applicable and easy to use, Google Forms ranked highest for three main reasons: it is entirely free; it offers an unlimited number of responses; and respondents can use different types of devices, including mobile devices. Google Forms, like other survey applications, provides basic analytical results in graphs, numbers, and percentages. Additionally, Goggle Forms collects data in a spreadsheet format that can be easily used during transferring data to statistical analysis applications such as SAS, SPSS, R, or Microsoft Excel. Google Forms does not include any information on respondents who drop out while answering the survey, but the researcher does not consider the issue significant. The researcher will rely mainly on defined respondents' societies and communities in Saudi Arabia.

R was used as the electronic statistical analysis tool. Two main reasons were behind the decision to use R. First, R is a preferred programming language for the many statistical methodologies that are based on research and the latest findings. We had many different options for the analysis of the survey data, including SAS, R, and SPSS. Considering the survey had some open-ended and multiple-choice questions, the resulting answers due to multiple selections were grouped together and sometimes separated by commas or other alphanumeric characters. The answers to open-ended

[28] The researcher conducted several tests using all defined tools. Also, he asked subject matter experts within his network.

questions posed a more significant challenge of cleaning and formatting the text for analysis. Because SAS and SPSS are structured and pre-formatted languages, they would have difficulty analyzing this data. As a functional language, R is more flexible with plethora of packages available for language correction and formatting the answers using spell-checks and replacements.

The second reason for selecting R is budgetary. R (https://www.r-project.org) is an open-sourced package that is free of charge. However, it requires some programming skills. The RStudio (https://www.rstudio.com), which is also free of charge, may help significantly.

Table 34: The most suitable survey tools on the internet

Features	Google Forms	Fluid Surveys	Survey Monkey	Zoomerang
Cost	(+) Free	(-) Free but limited	(-) Free but limited	(-) Free but limited
Export Feature	(+) Collect data in a Google spreadsheet	(+) Export data to a spreadsheet	(+) Export data to a spreadsheet	(+) Export data to a spreadsheet
Responses Limit	(++) Unlimited number of responses	(-) 150 responses for the free version	(-) 100 responses for the free version	(-) 100 responses for the free version
Trace Responses	(-) Does not screen out IP address of respondent	(+) Screen out IP address of respondent	(+) Screen out IP address of respondent	(+) Screen out IP address of respondent
Answer via Mobile Feature	(+) Respondent may use mobiles to answer	(-) Service not available	(-) Service not available	(-) Service not available

(+) / (++): signs of advantages; (-) / (--): signs of disadvantages

5.6.2 Questionnaire

According to Litwin (1995), “good surveys yield critical information and provide important windows into the heart of the topic of interest” (p. 1). The survey followed Litwin’s advice. Thus, the four main considerations for producing the survey of this research are: the foundation of the survey’s concepts and questions, the design and structure of the survey, the assessment of the survey before the pilot phase, and the controls of the survey for having the right respondents.

5.6.2.1 The Survey's Foundation

The plan is to build a questionnaire that is based on the experience of investors within the entrepreneurship and MSEs development ecosystem in Saudi Arabia. Thus, the researcher adopted the knowledge of the Saudi Aramco Entrepreneurship Center (Wa'ed) in terms of filtering and screening entrepreneurs' applications, interviewing procedures, and applying due diligence basics for several reasons. First, Wa'ed is well structured as it is built based on the experience of the mother company, Saudi Aramco, which has been in entrepreneurship and SMEs development since the 1950s, as Farmer (1959) mentioned in his article. Second, Wa'ed has varied experience in financing entrepreneurs and SMEs as it provides seed funding, debt loans, non-collateral loans, and venture capital financing vehicles. Third, it provides a popular training program that is linked to its funding vehicles. Fourth, the procedures and governance that Wa'ed applies are of high credibility and reputation to the extent that they are being adopted by several entrepreneurship and SMEs development organizations in the Kingdom, such as the Centennial Fund, Badir Incubator, and KFUPM Incubator. Fifth, with no hesitation, Wa'ed welcomed the researcher's request to adopt its perspective and procedure for this study.

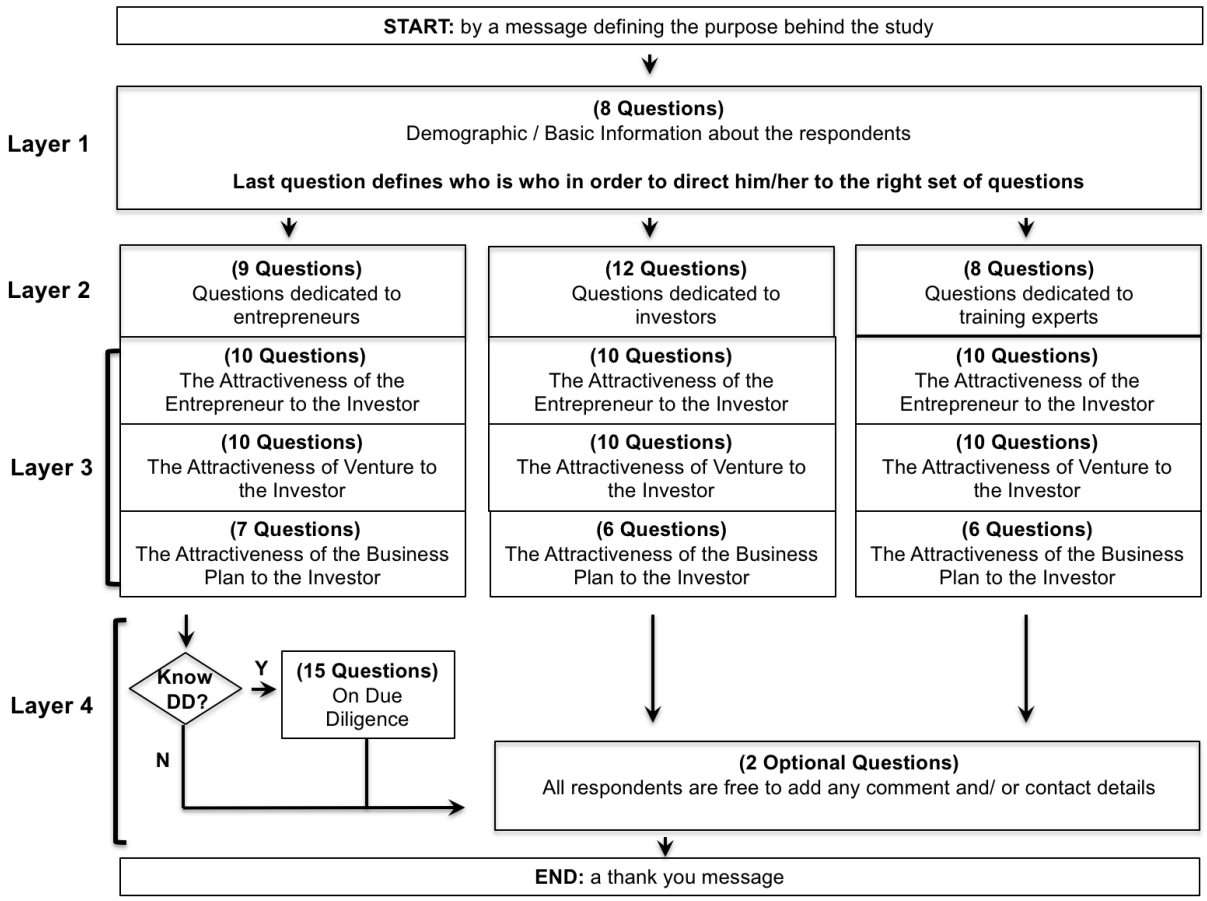
Significantly, Wa'ed's procedures were created by major names in the management consultancy field, such as Booz & Co., Bain & Co., and Deloitte, along with financial analysts and investment consultants from the Treasury Organization and New Business Development Department within Saudi Aramco. Although those consultants based their work on benchmarked standards, the climate and circumstances of the entrepreneurship and SMEs development ecosystem were the main considerations in building the center's governance in dealing with entrepreneurs. Thus, the questions of the survey are built based on this foundation.

5.6.2.2 The Survey's Construction

To identify the gap in the entrepreneurship education and training that may strengthen the research argument in having an optimal training module to better engage entrepreneurs with investors, the survey will include three categories of respondents, as revealed in Figure 28 in the conceptual framework section. They are the investment and funding institutes (investors), the entrepreneurs, and the entrepreneurship education and training experts (trainers). Thus, the survey will have three different paths.

In constructing the survey, which relies on the research question, as Bryman et al. (2008) state, the questions are close-ended with few open-ended ones. This combination is based on the nature of the study (Cohen et al., 2007; Bryman et al., 2008). Figure 29 reveals the initial structure of the survey. The general rationale behind this structure is to assess answers of investors, entrepreneurs, and training experts in order to identify gaps of understanding based on the answers of the investors, toward answering the main questions and sub-questions of the study.

Figure 29: The final look of the survey's structure



The survey starts with a welcome message (Appendix 1) explaining the rationale behind the study, assuring that it is for an academic purpose only. In addition to the start and end pages, the survey will consist of four main layers with different sets of questions. The first layer (see Appendix 3) contains eight demographic questions, such as age, gender, educational level, and related questions, that may add a supplemental value to the study during the analysis. All respondents answer these questions. The last question will identify whether the respondent belongs to any of the three targeted categories of respondents, which are investors, entrepreneurs, or training experts. Respondents who

do not belong to any category will be led to the end of the survey. Other respondents, based on their answer, will follow the path dedicated to them in the next layers. In the second layer, each category of respondents will have a set of questions to answer regarding their field (see Appendices 4, 5, and 6).

The third layer of the survey is the area of assessing answers based on the investors' perspectives. The assessment will cover the attractiveness of the entrepreneur (see Appendix 7), the attractiveness of the venture (see Appendix 8), and the attractiveness of the business plan (see Appendix 9) to investors. For the entrepreneurs, for instance, they will answer a set of questions related to the main features they believe investors are seeking in entrepreneurs. Other questions involve information provided to investors. Entrepreneurs will also answer a set of questions related to the character of ventures they believe that investors are seeking and a set related to the most important parts of their business plan they believe that investors are considering. The investors and the training experts will perform the same exercise by answering the same sets of questions. This part mainly involves the credit rationing issue, where the entrepreneur's character, skills, and necessary information are the concerns.

Before proceeding to the last layer of questions, it is important to ask the entrepreneurs about their awareness of the due diligence that investors conduct. Thus, an additional set of questions (see Appendix 10) are dedicated for this part, in case entrepreneurs answer that they know the concept. The last layer, which all respondents will reach toward the end, contains two optional questions regarding if a respondent has a comment to add or wants to leave contact information for future communication.

5.6.2.3 Test the Survey on Paper Before Piloting

Testing the survey before piloting, according to Litwin (1995), is important. The data collection method and the format and wording of the questions should be checked. Based on Mora's advice (2011), the researcher considered four main validity concepts. First is face validity, where questions should appear in the correct way to obtain the information needed for the research. Second is content validity, making sure that survey questions reflect the core subject of the research. Third is internal validity, where questions should identify the relationship between the independent variables and the dependent one, which is the main research question of the study. Fourth is external validity, which focuses on the possibility of generalizing the outcome to the sample population in the

survey. For this research, the results will be presented to a set of selected investors to gather their opinions and recommendations, which is the second part of the study.

Evaluating the survey in terms of validity, according to Blessing and Chakrabarti (2009), participants must be ready to "be particularly critical and requested for feedback on their experiences" (p. 114). To test the structure and the questions of the survey, the researcher relied on Bryman et al.'s (2007) advice to have a set of actual participants. The researcher identified 14 people (five entrepreneurs, five investors, and four training experts) for this mission before piloting the survey. Five are investors or employees of two important investment institutes in Saudi Arabia, which are Qotuf in Jeddah and Saudi Aramco Entrepreneurship Center in Dhahran. Additionally, four are subject matter experts in the training field, such as trainers, program developer, and consultant, and are from Saudi Aramco Entrepreneurship Center. Also included are five entrepreneurs, men and women, some who succeeded in obtaining funding and some who did not. The researcher carefully selected them as participants who "should be reasonably capable people," and they should be "chosen for their objectivity, not their advocacy" (Glass, 1997, p. 85). Also, the researcher selected these participants based on their willingness and ability to diligently volunteer time and effort and discuss comments, notes, and concerns openly with the researcher.

The survey was on paper, at this stage, and distributed among the selected evaluators. Gay and Airasian (2003) recommend that reviewers answer the questionnaire to check its validity. Thus, the examiners (see Table 35) answered the survey after the researcher sat with each one of the evaluators to explain the rationale of the study and what is expected of them. Their evaluation will be based on Bell's advice (2014) regarding monitoring answered and non-answered questions, identifying any ambiguity in the survey, addressing the length of the survey, assessing if there is any topic that needs to be addressed or omitted, addressing the look and attractiveness of the survey, and soliciting any further comments the tester has. The researcher asked the evaluators to write down, on the hard copies of the survey they received, all comments and/or recommendations they may have for later discussion with the researcher. The evaluators shared their comments and concerns freely with the researcher. The researcher received several comments from the respondents and listed the major ones as revealed in Table 36. They were the following:

1. All 14 examiners agreed that the survey was enjoyable yet long. All expressed that a long survey could harm the study because during an actual survey, respondents may drop out because of its length. The researcher accepted the comment and

reduced the questions defined as non-related to the study and the questions that cover the internal issues of investors that could include non-disclosed investor's information.

2. Five investors and the four training experts recommended deleting the due diligence part of the study. They justified their recommendations by noting that this part is too technical. They said most of the entrepreneurs do not know due diligence, and the possibility is high that the entrepreneurs may either give fake answers or stop answering the survey and drop out. The researcher believes this is an important part of the study. Thus, he rejected this recommendation, as he wants to test it first. In fact, he considers this note as a positive sign for the study, yet he will look at it seriously based on the test results. It is worth noting here that entrepreneurs made no recommendations on the due diligence part. They did not even ask to delete it as investors and training experts did. In contrast, one of the entrepreneurs, Jameelah Atwa, commented that "it is a course by itself," expressing her appreciation to learn new information. All of them agreed that they are unsure if their answers are right or wrong. The researcher accepted this valid note.
3. Three out of five investors recommended to remove any question that covers the internal policies or governance of investors, as investors in the actual survey most likely will not answer those questions for business reasons. The researcher accepted the recommendation and deleted most of the questions in this area but retained and rephrased others, as they are significant to be tested during the second phase of the pilot study.
4. The training experts suggested rephrasing some questions, as they were unclear and caused confusion. The researcher accepted the recommendation.

This exercise was challenging as the researcher followed up with the examiners to finish the evaluation. Most of them are located in Dhahran on the east coast of Saudi Arabia. Others who were contacted via phone calls are in a different city, such as Tuba Terakli (investors) and Abdurrahman Hariri and Yahya Ghunaim (entrepreneurs), who are in Jeddah on the west coast of the Kingdom. In general, the examiners were eager to participate in evaluating the work, indicating a strong willingness to help the researcher.

Table 35: Participants in evaluating the construction and questions of the survey

Category	Name	Nationality	Position	Role / Area of Activity
Investors	Tuba Terekli	Turkey	CEO, Qutouf, Jeddah, Saudi Arabia	Investor, Final decision maker
	Bader Zahrani	Saudi	Enterprises Development Division Manager, Saudi Aramco Entrepreneurship Center, Dhahran, Saudi Arabia	Final recommender after conducting the Due Diligence
	Trey Goede	USA	Development Manager, Aramco Ventures, Dhahran, Saudi Arabia	Originator, sourcing and screening
	Mustapha Maga	Canada	Chief Investment Officer, Aramco Ventures, Dhahran, Saudi Arabia	Final decision maker committee member
	Ziad Abduhadi	Saudi	Development Manager, Aramco Ventures, Dhahran, Saudi Arabia	Business Development Manager (Due Diligence)
Training Experts	Rashid Khan	USA	Head of Intellectual Property & Mentor Saudi Arabian Oil Company	Senior instructor in IP and Entrepreneurship
	Einas Ashgar	Saudi	COO, Training and Mentorship Programs Development Manager, Saudi Aramco Entrepreneurship Center	Second level approval for funding entrepreneurs
	Khalid Budair	Saudi	Business Development Manager, Trainer, Mentor, Saudi Aramco Entrepreneurship Center	Trainer
	Ahmad Nuaimi	Saudi	Wa'ed Startup Lab Incubator, Dhahran, Saudi Arabia	Mentor and Trainer
Entrepreneurs	Loai Labani	Saudi	A successful startup entrepreneur presented a business plan and got funded	CEO, Information and Communication Technology Venture
	Abdurrahman H	Saudi	A successful startup entrepreneur, self funded.	CEO, Incubation and mentorship
	Hytham Dham	Saudi	A startup entrepreneur, failed to get funded, business failed after 2 years	CEO, Media
	Jameelah Atwa	Saudi	A startup entrepreneur, failed to get funded, business failed after 2 years	CEO, Social Services
	Yahya Ghunaim	Saudi	Failed startup did not get funded	Medical Services

Table 36: Examiners' comments and recommendations

Examiners	Observation	Frequency	Action	Note(s)
Investors	Long survey	5 out of 5	Accept	After discussing and understanding the rationale with examiners, the researcher accepted the observation. The researcher took out a set of weak and unrelated questions.
	Stay away from internal info & Politics	3 out of 5	Accept	The researcher noticed that investors do not like to answer questions related to their internal governance or rationales behind investment. The researcher took out a set of questions, but kept some after rephrasing.
	Omit the Due Diligence part	2 out of 5	Reject	Examiners claimed it is too technical. They claimed that most of the entrepreneurs do not know it, which may lead to either respondents give fake answers or just do not continue answering the survey. The researcher believes this is a major part of the study. This note is a positive sign in favor of the study.
Training Experts	Long survey	4 out of 4	Accept	
	Re-write some questions as some could confuse entrepreneurs	3 out of 4	Accept	The researcher re-phrased the subject identified questions.
	Omit the Due Diligence	3 out of 4	Reject	The researcher rejected this observation as this is a core part of the study.
Entrepreneurs	Long survey	5 out of 5	Accept	N/A
	Keep it open to all on internet and in both Arabic and English language	5 out of 5	Accept (Partially)	The survey will be web-based on Internet. However, The researcher is targeting potential creative and innovative respondents. Most likely, this category of respondents communicates in English language. Thus, the survey language is English only.

5.6.2.4 Controls Toward Having the Right Respondents

Controlling who should respond is a challenging issue, as the researcher does not want to sink in a pool of biased responses. However, this factor should not affect the role of randomness, as Coren (2001) emphasizes the significance of randomness in social studies, which this study considers in its survey.

The researcher applied three main controls for testing. First, only respondents from the three categories, as defined previously, are to answer the survey. Thus, respondents

will identify themselves by category of respondents. Those respondents who do not belong to any of the three defined categories will be routed to the “Thank You” page, ending the survey. However, this control cannot be considered as a clean and sealed one as the same respondent may attempt to visit the survey again. Based on the researcher’s experience during testing instruments, other applications, such as Survey Monkey and Fluid Surveys, which add cookies in the respondents’ devices, also cannot prevent the same respondents from answering again using different devices.

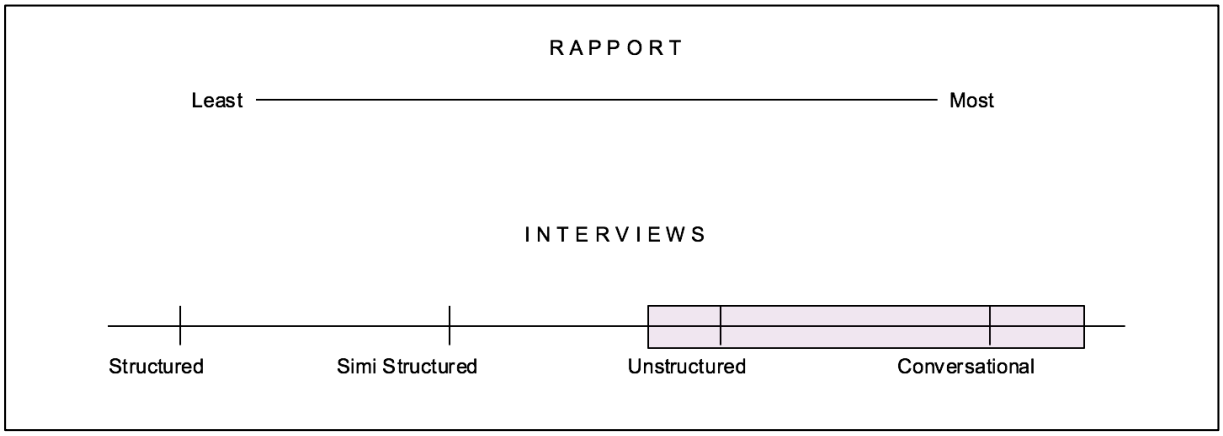
The second control is to keep most of the micro financed entrepreneurs away from participating as they are not a targeted population. Although the researcher is targeting specific communities, having the survey accessible on the internet could expose it to others to enter and answer. In general and based on the researcher’s observations and engagement in the entrepreneurship development activities in Saudi Arabia, such entrepreneurs rely on the government and charity assistance for the survival of their micro sized businesses. What is important about this category is that most of them, based on the researcher’s observation, do not read or write in English, and the survey was meant to be conducted only in the English language.

The third control is to eliminate biased and emotional feedback as much as possible. A study conducted by the University of Chicago on using a second language found that “people are immune to […] biases when they think in their second, less familiar language” (Keysar, Hayakawa, & An, 2012, p. 661). People do not use the typical framing in answering or selecting an answer when using a non-native language. However, the study did not reach a conclusion of why people are less rational when they answer in a second language.

5.6.3 Interviews

According to Rubin and Rubin (2011), the in-depth interviews provide an opportunity “to learn about the world” (p. xv). A select number of investors, with high credibility and reliability depending on their reputation, will be interviewed. The purpose of the interview is to exhibit the results of the survey and obtain their opinions. The interviews will use the format of unstructured to conversational (Figure 30). To enable interviewees to provide the needed information, rapport is crucial, as Walsh and Bull state (2011, p. 74). Ryan and Dundon (2009) indicate in their research interviews study that “solid rapport elicits superior quality data.” Unfortunately, there is no unified definition for respondent rapport interviews (pp. 443–444).

Figure 30: The interviews' nature



The questions will be grouped into three main categories, as in Rubin and Rubin's (2011) classification (see Appendix 11). The categories are main questions, probes, and follow-up questions. The researcher will first present to the interviewees the study results and findings. The questions that will be asked during the interviews are seven sets of conversational open-ended questions (see Appendix 11). They are more guidance to the conversation rather than exact questions and answers, as the researcher will offer the interviewees the full freedom to elaborate on the subject.

The first category, which is the main questions, contains questions the researcher will ask interviewees on the findings of the study. Considering the tight schedule of the interviewees, the questions are direct in approach, yet they offer full freedom to the interviewees to elaborate. The second category of questions is the probes, which may lead to more specific answers or insights. For each main question, there is one or more probes. This category allows the researcher to discover or obtain more insights from the interviewees that may add value to the study. The third category is the follow-up questions. The researcher will offer interviewees the opportunity to talk further, adding any comment they have or believe is important to say or mention.

The defined questions (see Appendix 11) are only a proposed framework, with the opportunity for other questions to occur during the conversations with the interviewees. This set-up will help interviewees to elaborate, offering insights that could have a high value to the study. After conducting the interviews, the researcher will send an email to every one of the interviewees for two main reasons. First is to confirm the interviewees' answers. Second is to confirm that they agree to mention their name in the study, which will be used for academic reasons only.

The researcher will use an audio-recording device[29] to record the conversations with the interviewees. The interviewees will be informed of all related ethical issues in advance, including their rights to not permit audio recording and opt instead for written notes, to stop the interview at any time, and to obtain a copy of the conversation. The researcher will use his personal mobile device to record the conversations. The researcher will retain the audio-recorded materials until successfully earning his degree in this research. All interviewees will be informed of the researcher's intention regarding recorded materials.

5.7 Piloting

After ensuring that the survey was ready for piloting, the questionnaire was opened on Google Forms as available for testing as a web-based survey. This part assesses the validity and reliability of the questionnaire, which is significant (Cohen et. al, 2007; Bryman et. al, 2008).

5.7.1 Test the Survey on Internet

Testing the survey via actual participants during a period of four months (August 2014 to November 2014), 58 respondents answered the survey as a result of direct contact with five entrepreneurship and SMEs development societies through visits, phone calls, and emails (see Table 37).

Table 37: Entrepreneurs' societies targeted during the pilot study

Society	Nature	Location
1. Saudi Aramco Entrepreneurship Center	Training Institute / Financier	Dhahran, Saudi Arabia
2. Flat 6	Incubator	Jeddah, Saudi Arabia
3. Makkah Accelerator	Accelerator	Makkah, Saudi Arabia
4. King Fahd University of Petroleum and Minerals	Incubator	Dhahran, Saudi Arabia
5. The Centennial Fund	Training Institute / Financier	Riyadh, Saudi Arabia

In the 106 days that the survey was available to the targeted communities on the internet, the total number of responses was only 58. However, seasonal vacations during

[29] The researcher used his own two mobile devices (iPhone 6+ and iPhone 6) for recording the interviews. The reason for using two devices is to prevent any failure of a device from disrupting the interview.

the subject period of time played a major role in extending the time. Also, the length of the survey could be another factor. The following issues were noticed:

1. Out of the 58 respondents, two decided not to continue. Regarding gender, the survey attracted 80% male and 20% female. The low percentage of female respondents is acceptable because there are significantly fewer female entrepreneurs than male entrepreneurs worldwide, according to Thebaud (2015).
2. A combination of Saudi and non-Saudi respondents answered the survey, with almost 79% Saudis and 21% non-Saudis. As for age distribution, almost 75% of the respondents varied between the ages of 20 and 40, which the researcher considers a suitable age category for this test. The educational background reveals a reasonable diversity, where 80% of respondents hold a college or university degree or above, with 60% of those respondents graduating from Saudi schools and 40% from schools abroad. In educational field, almost 90% of the respondents are split among business, science, and engineering. The respondents' locations reveal their distribution by area within the Kingdom. Significantly, 48% of all respondents are from the eastern region of the Kingdom, which may indicate to what extent that entrepreneurs are facing a serious challenge with investors by location.
3. Almost 40% of the respondents expressed their opinion about the survey. The opinions offered positive feedback toward the survey despite its length. The respondents were asked, at the end of the survey, whether they learned anything from the survey that added to their knowledge. Of the 20 respondents who submitted their feedback, 18 offered positive responses to the subject question. Of the remaining two, one replied "Thanks" and the other expressed a dislike of the survey. The latter respondent wrote "I thought several times to quit the survey." Answering this final optional question indicates that this respondent did not quit and had some attraction to the pilot survey, which the researcher considers as positive.
4. The pilot study indicated that some questions need rephrasing or rewriting based on valuable comments of some respondents. Significantly, several comments in this regards were on the due diligence part, as some respondents found some of the questions difficult to understand. The researcher found that such comments came from entrepreneurs who answered that they do not know what due diligence means. The wording was revisited, in coordination with Wa'ed investment experts, to ensure clarity. According to Bradburn et al. (2004), "precise wording of questions plays a vital role in determining the answers given by respondents" (p. 3).

5.7.2 Statistical Tests

As a further evaluation, an exact chi-square test of independence was used to evaluate whether investors and entrepreneurs answered differently. This test was selected because both levels are measured at the nominal level (i.e., they are categorical variables as opposed to quantitative variables). The pilot indicated that a much larger sample size is needed to have enough statistical power to find statistically significant effects. Also, the pilot revealed that some questions have too many answer options, making it difficult to find statistically significant effects. The chi-square test assumes that no more than 20% of cells have frequencies lower than 5. With many answer options, the frequencies will inevitably be higher. The recommendation here is to have no more than 3 to 4 answer options per question if possible. We also made use of Log-linear classification model to test for independence of the questionnaire answers with the responders, and to identify any interaction effects with demographics variables, to be discussed later in Chapter 6.

5.7.3 Final Look of the Survey

Exploring the main enhancements on the survey to prepare it for the live run, 12 questions were removed for adding no solid value to the study. A crucial issue that was noticed during the pilot phase is the high value of selecting the answer option of “Somehow / partially agree.” The researcher decided to remove this answer option from the due diligence part. This answer option offers the respondent an opportunity to select a diplomatic answer that may not add a solid value to the study. Instead, the researcher added the option of “I do not know,” which adds a more solid value. The survey will remain on Google Forms, and it will be available on the internet through a defined link that will be sent to targeted communities.

5.7.4 Challenges During Piloting

It is essential to identify any limitation in this exercise to “enrich future studies” (Zahra, 2007), especially in a country like Saudi Arabia, which is transforming economically and socially. The researcher has identified two limitations during the pilot study, which are likely to consider in managing expectations. First is time constraints. Time is needed to identify and access a large pool of willing respondents. Contacting the targeted population could be conducted via phone calls and emails, yet the researcher was not that successful in reaching many of them. Thus, physically approaching entrepreneurs,

investors, and training experts in Saudi Arabia was important. However, it was costly and time-consuming. Second, while conducting the pilot study, the researcher stipulated the confidentiality and non-disclosure of the answers provided, yet he was asked several times to provide proof. For the empirical phase of the study, the researcher requested written proof from the school to offer when sought by respondents to assure them of the goals and usage of the information provided (see Appendix 2). Based on the researcher's experience, Saudi society still contains conservative people who are hesitant to provide information or participate in surveys that are related to socioeconomic subjects.

5.8 Ethical Issues

The Saudi Arabian culture remains a conservative sociocultural environment when providing information or participating in a data collection process. Thus, all information disclosed by the respondents will be acquired confidentially, privately, and with full respondent anonymity. Although this stipulation may initially affect time constraints, it will ensure the validity and reliability of the data. A clear cover message (see Appendix 1) in the survey will define the purpose of the study and state that its purpose is for academic use only. Also, the researcher, while contacting respondents, will state this fact during his conversations. Additionally, the survey will include an option at the end for respondents to leave their contact information voluntarily so the researcher may contact them if needed.

As a related important point on people's conservativeness in Saudi Arabia, the researcher will consider the 11 major checklist points of Bradburn et al. (2004), which will assure respondents there is no threatening language or signals in the questionnaire. Although "there is no standard method to determine whether a question is threatening or not," Bradburn et al. (2004, p. 52) suggest that researchers should ask themselves if a question could sound or appear threatening.

Another concern is related to the population sample. The researcher is approaching certain populations, which is considered as non-random. This approach is needed to access the population who is participating in the entrepreneurial activities in the Kingdom, such as funding, startups, and training. A non-random sample could breach the anonymity of respondents. However, the researcher asked concerned parties, such as incubators and educational institutes, to inform their members about the survey. Thus, the researcher does not personally know the respondents. For the interviewees, the researcher explained the process and goals of the interview beforehand and presented

them the official letter from the Durham Business School (see Appendix 2) when needed. The researcher was fully obligated and committed to Durham University policies to maintain rigorous practice in his research.

5.9 Scope and Limitations

The researcher acknowledges potential limitations in the research. First, literature on entrepreneurship, SMEs, and investment in this subsector in Saudi Arabia remains underdeveloped. Several authors wrote about the issue, yet the subject was under the economic category and not as a dedicated subject. Since Farmer (1959), who was first to write on entrepreneurship in Saudi Arabia, writers such as Al-Hajjar and Presley in 1992 and Loony in 2004 started adding to the literature. Other writers, such as Albakr (2016), Kayed and Hassan (2013), Khan (2013), Minkus-McKenna (2009), and Porter (2008, 2009, 2010), started to examine entrepreneurship and SMEs as a subsector within the Saudi economy, providing a step change in the type of information delivered. Also, a number of academic researchers, such as Abalkhail (2009), Abousaber (2013), Alfaadhel (2010), Sadi (2010), and Alsheikh (2011), started to contribute to the literature. However, with an absence of data about the ecosystem, more efforts and contribution to literature are still needed.

The second limitation is accessing a larger pool of respondents. The researcher noticed that people in the Kingdom are not always encouraged to respond to studies and data collection, as Saudi society remains in the evolving phase from longtime conservatism to more openness. Thus, it was challenging to communicate with the targeted population, negatively impacting the number of responses to the study.

5.10 Summary

This study will answer the question of why there is a need to have an optimal entrepreneurship training module to better engage entrepreneurs with investors toward building their startups. The study is, by nature, an explanatory mixed method. The first part of the study is quantitative, where variances in answers between the categories of respondents are measured. In the second part of the study, a holistic view of subject matter experts in the world of SMEs investment in Saudi Arabia is formed toward deriving answers to the research's question and sub-questions.

This chapter presents the conceptual framework of the study. It outlines the research question and sub-questions of the study. Also, this chapter presents the research methodology and design. It identifies the sample population for the two parts of the study and the used instruments, which are a questionnaire and then a set of interviews. The piloting of the first part of the study is described with results to fine-tune the survey for the empirical run. Also, the ethical issues and the scope and limitations are identified.

CHAPTER SIX: DATA RESULTS AND ANALYSIS OF THE SURVEY

6.1 Introduction

This is the sixth chapter of a study that begins with data results and analysis of the survey and ends by elaborating further on the results in the form of a discussion. The data results and analysis will only address responses with apparent significance. In this chapter, we capture discussions on (1) data collection, (2) responses to the primary research questions and sub-questions, (3) discussion, and (4) chapter summary.

6.2 Data Collection

6.2.1 Data Collection and Traffic on the Survey Website

The survey became available on the Internet on August 1st, 2015, after the researcher received formal approval to move forward with his survey on July 27th, 2015. The plan was to keep the survey available on the Internet for two months, ending on the last day of September 2015. As stated previously, the researcher directly approached entrepreneurs' communities, investors, and experts on entrepreneurship training subject matter.

In the empirical portion of this study, the researcher used the "Google URL Shortener" service to track all traffic on the survey website. This tool allows the researcher to identify the frequency of responses. Google™ provides this service for free to enable users to create a shortened Uniform Resource Locator (URL), which is an address of a webpage such as a survey on the Internet.

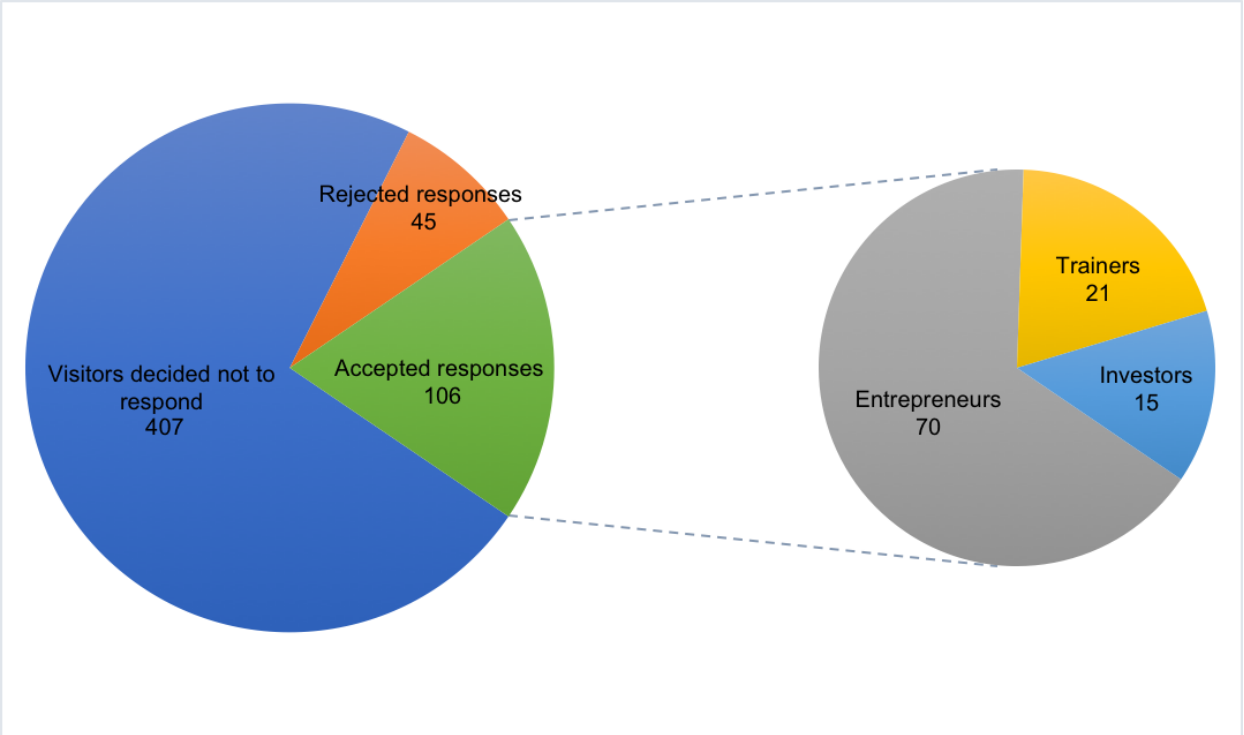
6.2.2 Demographic Information

Out of 558 visits on the survey site from August 1st, 2015 to September 30th, 2015 (see Figure 31), only 151 responded to the survey. This represents only 27% of the total visitors. Out of the 151 respondents, 45 respondents were rejected either because (1) they did not want to continue the survey, or (2) their ventures were built outside of Saudi Arabia. The end number of respondents that will be assessed is 106 only. In terms of the career categories of respondents 70 respondents (66%) identified as entrepreneurs, while only 15 respondents (14%) identified as investors, and 21 as trainers (20%).

The information about respondents exhibits diversity in several respects (see Table 38), For instance, 69 of the accepted respondents (65%) are male, while the other 37

respondents (35%) are female. The survey attracted 92 Saudis, representing 87% of the total, while 37 respondents are not Saudis, representing 13% of the total respondents. In terms of age, 12 respondents, representing 11% of total, are 50 or older. Eighteen respondents (17%) are between 40 and 49 years old, while 43 respondents (41%) are between 30 and 39. The remaining 33 respondents (31%) are under the age of 30.

Figure 31: Summary of responses to the questionnaire



The educational backgrounds of the accepted respondents are diverse as well. A total of 37 respondents (35%) received their education from Saudi universities and colleges, while the remaining 69 respondents (65%) received their education from non-Saudi educational institutes. Many of the respondents, a total of 48 (45%), hold bachelor's degrees; 42 respondents (40%) hold master's degrees. Only eight earned high school diplomas, and another eight respondents earned doctorate degrees.

It is important that all respondents were from major cities located in central, eastern, and western areas of Saudi Arabia. There was one entrepreneurial respondent from both northern and southern cities of the Kingdom. The researcher did not expect any significant number of respondents to be from the northern and southern regions of the Kingdom because entrepreneurial activities in these regions are almost nonexistent, based on his observations. However, the respondents from their areas are almost nonexistent. In terms of the distribution of respondents by region, a total of 56 responses

(53%) were received from the eastern region of the Kingdom. Another 17 responses were received from the central region of the Kingdom (16%), and another 31 responses (29%) were from the western region.

Table 38: Summary of the demographic information

Category	**Results / Notes**
Categories of respondents	Entrepreneurs: 70 (66%) Investors: 15 (14%) Trainers: 21 (20%)
Gender	Male: 69 (65%) Female 37 (35%)
Nationality	Saudi: 92 (87%) Non-Saudi: 37 (13%)
Age	50+: 12 (11%) 40-49: 18 (17%) 30-39: 43 (41%) 29 and below: 33 (31%)
Education institutes	In Saudi institutes: 47 (35%) In non-Saudi institutes: 69 (65%)
Education degree	High-school diploma: 8 (7.5%) Bachelor's: 48 (45%) Master's: 42 (40%) Doctorate: 8 (7.5%)
Responses by region	Eastern: 56 (53%) Central: 17 (16%) Western: 31 (29%) Southern:1 (1%) Northern: 1 (1%)

6.3 Responses to Main Research Questions and Sub-Questions

The plan was to identify significant evidence that may support the argument for having an optimal training module to better engage entrepreneurs with investors for potential financing. Distinct sets of questions were listed on the survey; they addressed three primary areas of attractiveness, including the entrepreneur, the venture, and the business plan. Additionally, a fourth set of questions regarding the concept of "due diligence" and the importance of including it in training modules, is also listed on the survey.

Fisher's exact test, which is in use due to the small sample size (Kim, 2017), was conducted to assess the independence of the response to the question as opposed to the responders. There were some questions for which there is a correlation (vis-a-vis difference is the response between the respondents). However, the remaining questions displayed a 10% correlation, which is not significant.

6.3.1 Data Analysis Regarding the First Research Sub-Question

The first sub-question is "What additional knowledge do entrepreneurs need to learn to be more attractive to investors?" The sub-question was on the survey under the section of "attractiveness of the entrepreneur to investor," which contained 10 questions. The data analysis in this section demonstrates that it is difficult to find concordance between all three responders: entrepreneurs, investors, and trainers. This indicates that the questions in this section may be poorly phrased and may therefore require future refinement. Additionally, the responses to open-ended questions were likely to resemble general comments rather than specific answers. This stopped the researcher from analyzing them further to prevent any risk of subjectivity.

6.3.2 Data Analysis Related to the Second Research Sub-Question

The second sub-question is: "What additional knowledge do entrepreneurs need to learn to make their ventures' concepts more attractive to investors?" The sub-question was asked in the survey under the section "attractiveness of venture to investor," which contained 10 questions. However, the following two questions within this section yielded significant answers.

Table 39: Question: Is the timing of the idea is a first thing that an investor considers?

Selection	**Trainer**	**Entrepreneur**	**Investor**
True; some great ideas arise at the wrong time and the market may not be ready for it	10	40	11
Not true; a great idea could expand the customer base at any time	11	20	4
Do not know whether this is an issue that investors focus on	0	10	0

There are significant differences in the proportions of the responses to this question (P Value = 0.0744). Investors view the timing of the idea through a slightly different lens. The investor may also be wrong sometimes or may be conservative and think that the timing of the idea determines everything; this may be because proportionally higher numbers of entrepreneurs are devising market-changing ideas, and the history of e-commerce, including Ali-Baba and Facebook, is a testament to this.

Table 40: Question: What is the size of a funding ticket of a venture that attracts the investor in the Kingdom more?

Selection	**Trainer**	**Entrepreneur**	**Investor**
They do not know	7	21	0
More than 200,000 Saudi riyal but less than 2 million Saudi riyal	6	20	2
More than 2 million Saudi riyal but less than 4 million Saudi riyal	3	7	4
The ticket size is not an issue for investors when there is an opportunity in a venture	3	17	9
Less than 200,000 Saudi riyals	2	5	0

The question regarding the venture size demonstrates significance differences among the three responder groups (P Value = 0.01886). Investors do not display a lack of awareness of the venture size; they are either not concerned about the size or are seeking ideas that can effectively change the market. There is proportionately more support for smaller funding size among entrepreneurs; this might be because entrepreneurs prefer to start small and ride the bandwagon to see if that can produce improved and expanded outcomes. Trainers' focus is the opposite of investors, and this indicates that perhaps increased awareness is necessary here. Entrepreneurs appear to correspond more to the investors when it comes to size.

6.3.3 Data Analysis Regarding the Third Research Sub-Question

The third sub-question is: "What additional knowledge do entrepreneurs need to learn to make their business plans more attractive to investors?" This sub-question was asked in the survey under the section "attractiveness of business plan to investor," which contained six questions. The following two questions produced significant answers.

Table 41: Question: How can the venture's clarity be seen by the investor in the business plan?

Selection	Trainer	Entrepreneur	Investor
A business proposition	7	19	9
A business plan summary	4	25	6
The investor relies on a set of elements that identify the venture's clarity	10	26	0

This question concerning clarity in the venture through a business plan illustrates a significant divergence in thinking among the three groups (P value = 0.0063) using Fisher's exact test. In fact, this divergence is primarily because investors' thinking tends to be the opposite of what trainers and entrepreneurs believe in terms of venture clarity. Perhaps the options were not clear enough, since the third option may overlap with the meaning of "business proposition" and/or "business plan summary."

Table 42: Question: For an investor, is a proven business model with a minimum of a one-year track-record important in the business plan?

Selection	Trainer	Entrepreneur	Investor
Not true	7	5	3
True; it is important	5	30	1
True; it is important, but only in the case of a venture's growth business plan	9	35	11

The answers to the above question regarding track-record have significant discrepancies (P Value = 0.0027) between the three groups. This particularly applies to the option "true," which investors selected only rarely; instead, investors are relatively specific regarding where in the business plan the one-year track-record can be helpful. This implies that there is a significant divide in the trainers' and/or entrepreneurs' thinking relative to investors regarding the one-year specific track-record.

6.3.4 Data Analysis Regarding the Fourth Research Sub-Question

The fourth sub-question is: "Do entrepreneurs need to better learn how investors conduct their due diligence to prevent the problem of imperfect information?" This sub-question was asked on the survey as follows:

Table 43: Question: Do you think that entrepreneurs generally know what "due diligence" investor conduct means?

Selection	Trainer	Entrepreneur	Investor
They have basic knowledge about due diligence, but this does not mean they know how it happens	13	25	4
No, they do not	7	24	11
Yes	1	21	0

Significant differences were found between the responses of the trainers, entrepreneurs, and investors (P Value = 0.0017); the investors had the largest difference with the trainers and entrepreneurs for the “basic knowledge” response. Perhaps this indicates a divide in terms of how each of them conceives of basic knowledge. Similarly, 50% or fewer trainers and one third of entrepreneurs answered that entrepreneurs are aware of the definition of the investor’s “due diligence.” However, 73% of investors and around 30% of entrepreneurs think that entrepreneurs have any knowledge of what is meant by “due diligence.”

6.3.5 Data Analysis Regarding the Fifth Research Sub-Question

The fifth sub-question is” “Is the quality of the current entrepreneurship education and training programs in Saudi Arabia acceptable for preparing entrepreneurs to connect with investors to obtain financing to establish their ventures?” This sub-question was asked on the survey as the following:

Table 44: Question: In general, what is your perception of the quality of entrepreneurship education and training available in the Kingdom?

Selection	Trainer	Entrepreneur	Investor
Poor; needs restructuring because entrepreneurship is evolving so fast in the kingdom	2	14	11
did not attend any training	0	17	0
excellent	4	18	0
there is room for improvement	15	21	4

It is evident that investors are somewhat pessimistic about the training quality in Kingdom. The test of independence was rejected with P Value < 0.0001, suggesting that either the investors are not completely aware of the training, or that they have a limited knowledge of the benefits of training to the entrepreneurs. Investors' primary perspective is that they see potential for improvement in the training, and the data strongly suggests that they are in favor of restructuring the training programs.

6.3.6 Data Analysis Regarding the Sixth Research Sub-Question

The sixth sub-question is: "What can investors do to help entrepreneurship education and training institutes to better prepare entrepreneurs for engaging with investors on financing?" This sub-question is addressed through the qualitative part of the study. However, to prepare for this interview question with the experts in investment, the questionnaire asked investors and trainers about the nature their relationships with each other. It was evident from the answers that nearly half of the respondents indicated that there is no communication between the two sides. The other half of the respondents were more likely to report that their communication consisted of helping in evaluating training programs (as the trainers answered) and participating in lecturing and mentoring (as investors answered). None of the investors reported that the communication consists of sourcing potential entrepreneurs to investors; only two trainers mentioned that communication occurs for this purpose. Cohen (2015) noted that events occur because of ongoing conversations and communications between concerned parties, particularly in the case of fundraising. The survey answers demonstrate a weakness in communication between the investors and trainers.

Table 45: What do investors' and trainers' communications generally consist of?

Selection	Investors	Trainers
Help in evaluating training programs	2	6
Participation in lecturing, mentoring and/ or coaching	5	2
Sourcing potential entrepreneurs/ ventures to investors		2
No communication at all	8	11

6.4 Pairwise comparison of the groups

Since investors are at the root of entrepreneurship culture, the pairwise comparison of the entrepreneurs and trainers were performed separately from the investors' group. It

was discovered that the same questions were significant, with some degree of overlap with each other in the entrepreneur-investor and trainer-investor comparisons. The following were the significant questions that were already discussed in the earlier section: Investors' due diligence (P Value = 0.0065), most attractive investment size (P Value = 0.004), investors' venture clarity (P Value = 0.0045), investors' track record (P Value = 0.0115), training quality (P Value = 0.001). Conversely, the questions that demonstrated differences between investors and trainers were: investment size that attracts investors (P Value = 0.009), venture's idea clarity for investor (P Value = 0.006) and training quality of entrepreneurs (P Value = 0.0005).

Most of the above findings were discussed in the previous section, and the conclusions remain the same. Notably, the answers regarding investors' due diligence contain a significant discrepancy between the entrepreneurs and investors, relative to investors and trainers. This indicates that the discordance in understanding arises from the entrepreneurs' lack of getting proper coaching or any amount of coaching.

6.5 Subgroup Analysis

The researcher examined the subgroup analysis using through two angles, one which applied pairwise analysis of the responders, eliminating either entrepreneurs or trainers from the analysis. Another method involved considering the effect of demographic factors, such as gender, nationality, and education of the respondents. This three-way analysis of the survey answers, respondents, and demographics was performed using a log-linear model since each option was selected exclusively to test for the significance of interaction by comparing the conditional independence results and independence results using ANOVA. It was found that none of the demographics variables had any interaction effect to already significant questions, or to those that were not significant.

6.6 Discussion

This study asks one primary research question, which is: Why is there a need for an optimal training module to more effectively engage entrepreneurs with investors who are considering financing their ventures? A format of six sub-questions was developed (see Chapter One) to identify evidence to form an answer to the main research question. According to Eisenhardt (1989), quantitative evidence is likely to indicate relationships that are significant to the researcher. Therefore, the survey's questions intended to

support this study's argument to resolve the credit rationing through the human capital development umbrella with a focus on information asymmetry, entrepreneurs' characters, and skills.

The survey involved 151 respondents. Out of this total, two respondents decided not to continue the survey, while another 43 respondents stated that they are not entrepreneurs, investors, or trainers. Therefore, they were directed to end the survey. As a result, the number of accepted responses was only 106. They consisted of 70 entrepreneurs, 15 investors, and 21 trainers. The researcher, based on his experience with entrepreneurship and SMEs development communities, was expecting the number to be higher because during the piloting, the chi-square test indicated that a minimum of 100 entrepreneurs are necessary to prove significance in the answers to the survey questions. Unfortunately, that was not the case in the empirical survey.

Although the questionnaire addressed several areas in the format of sets of closed-ended questions and some open-ended ones, the data analysis discovered few notable indications related to the problem of information asymmetry more than entrepreneurs' character and soft skills. Regarding the attractiveness of the entrepreneur to the investors, no quality signal appeared significant enough to consider focusing on it. This could be because the questions in this section focus on basic characteristics that an investor would prefer in an entrepreneur, which are known or being explored in the available education and training programs in Saudi Arabia. However, the researcher applied the (2010) three Volkmann categories of behavioral, functional, and traits; the output was not significant.

Regarding the attractiveness of the venture to the investor, which is related to the second sub-question, there were only two questions out of 10 that demonstrated significance in the answers. They are related to the timing of the venture's idea and the track record of the business when seeking a proposed venture for financing. The timing of the idea, particularly when the market is not ready for it, is important for investors who are likely not ready to invest. This point is likely to be explained and understood by entrepreneurs. Entrepreneurs with different innovative venture ideas may need to consider other markets and not insist on building it in Saudi Arabia if the market is not ready for it. The second issue is the importance of track-record of a venture. The other eight questions address issues such as the industry dynamics, the geographical scope of the venture, and/ or the regularity environment in which the venture will grow; they did not yield any significant answers.

Regarding the attractiveness of the business plan to investors, which is addressed by the third set of sub-questions, there were only two questions out of six that yielded significant answers. They are related to venture clarity within the business plan and when the track-record must be included in the business plan. The other four questions, which are related to issues concerning the details and components of the business plan, did not show any significance. This may also suggest that entrepreneurs are likely to consider these two small, but important, issues within the business plan that investors are likely to focus on.

Regarding the fourth sub-question, which is related to the awareness of entrepreneurs of the due diligence of investors, a significant difference was discovered; this defends the main research question, particularly that issues such as the venture's timing, track-record, ticket size, and venture's clarity in the business plan documents, demonstrated some significance in the survey and are potential signals related to the due diligence of investors conduct when evaluating potential investments. However, it is too early to decide this because it is important to listen to the interviews first. Nonetheless, most of the investors (11 out of 15 respondents) answered that entrepreneurs do not know what due diligence means.

Regarding the fifth and sixth sub-questions, they relate to the quality of training and how investors may contribute. It is obvious based on the answers that investors generally see the current quality of entrepreneurship education and training in the Kingdom as poor despite the high number of available institutes and programs. However, the researcher cannot take this perspective for granted before collecting more insight from the interviews. However, it was indicated by the questions regarding the nature of communication between investors and trainers that the communication is likely to be weak, especially because almost 50% of investor and trainer respondents mentioned that there is no communication with each other.

In short, the output of the data findings and analysis for the questionnaire appears to not demonstrate a general significance; this does not fill the gaps in understanding of the issues that were explored. A major reason is likely the limited number of responses. Although the data analysis of the questionnaire did not show more than five quality signals that are considered due to the significance in answers, they are more likely to link themselves to issues that may require further exploration with investors through some sort of direct mentoring, coaching, or training sessions. However, it is too early, at this stage, to develop a clear conclusion about what subjects entrepreneurs need to learn about when dealing with investors. To address more significant arguments about the

issue, this study will proceed with a second part, which involves qualitative interviews with experts in investment. Rubin and Rubin (2011) praise the value of in-depth interviews to provide opportunities to learn more about the case. The nature of this research and its outcomes are “a two-phase mixed method,” as defined by Creswell et al. (2007, p. 71). It is important to remember that Valerio et. al. (2014) noted that entrepreneurship lacks a particular description and, over time, it becomes a complex subject. Therefore, a study in this field with both quantitative and qualitative components is more likely to yield a clear conclusion. The qualitative part of the study is likely to “explain significant (or nonsignificant) results, outlier results, or surprising results” (Morse, 1991 in Creswell et. al, 2007, p. 72). It will likely highlight that many voices exist in literature that call for transformation in entrepreneurship education and training. Dimov & Shepherd (2005), Hoque (2016), and other scholars (Cohen & Kador, 2013; Fairlie & Holleran, 2012; Fayolle, 2009; Henry, Hill, & Leitch, 2005; Kirby, 2004; Lima, Lopes, Nassif, & da Silva, 2012; Nkirina, 2010) who noted that a significant transformation is required in entrepreneurship education and training in terms of evaluating and presenting better knowledge to entrepreneurs.

6.7 Summary

The questionnaire is the instrument used in the first part of this study. Based on that, this chapter interprets the data findings and provides an analysis of the questionnaire. The traffic and demographic data was reported in this chapter. The second section of the chapter reported data concerning the responses based on the research sub-questions that address the main research question, as listed in the first chapter of this thesis. The “Fisher’s exact test” was used as it is recommended to use instead of chi-squared or z-test when the sample size, “but actually it is valid for all sample sizes” (Kim, 2017, p. 154). There was nothing significant regarding the first sub-question, but two evidences were reported for both the second and third sub-questions. Additionally, one signal was reported for each of the fourth, fifth, and sixth sub-questions. The chapter then explored more information about the use of the pairwise comparison and subgroup analysis. A discussion was then conducted regarding preparation to move forward to the qualitative data in the next chapter.

CHAPTER SEVEN: DATA RESULTS AND ANALYSIS OF THE INTERVIEW

7.1 Introduction

As mentioned in chapter 5, the nature of this research and its outcomes are highly relevant to be an explanatory "a two-phase mixed method," as defined by Creswell et al. (2007, p. 71). This chapter covers the qualitative part. According to Gartner & Biley (2002), it is important to go beyond providing an explanation of a concept to develop a theory that may explain the "why" of the studied phenomenon. This chapter focuses on the "why." Deeper knowledge is likely to complement the quantitative part in reaching a clearer picture on the researched subject (Cohen et al., 2007; Bryman et al., 2008). The in-depth interviews are more likely to provide an opportunity to learn more about a case that is being studied (Rubin & Rubin, 2011). The interviews took the format of unstructured to conversational in nature, as explained previously in chapter 5. To make it easier for interviewees to provide the needed information, rapport is so important here, as Walsh and Bull state (2011, p. 74).

Thus, the aim of this chapter is to get the feedback of the selected subject matter experts who expressed their willingness to participate in this research. They belong to the entrepreneurship and SMEs investment community in Saudi Arabia. Their feedback will be on the survey's results. Also, and more importantly, is to obtain their holistic perspectives on the subject of the case, which is the justification for having an optimal training module that is likely to better link entrepreneurs with investors toward financing their ventures. The same research main and sub-questions are used, but in conversational subjects.

After this short introductory section, this chapter includes five more sections: (1) the interviews' setup to introduce the interviewees, (2) the interviews' discussion pillars and questions, (3) the interviewees' feedback, (4) the significance of the study through their verdicts, and (5) a summary of this chapter.

7.2 The Interviews' Conduction and Interviewees

Six interviews, with highly credible and well-known subject matter experts, were conducted from January 2–13, 2016. Four were face-to-face interviews, and two were phone interviews due to the unavailability of the interviewees at their offices during the

subject time. All the interviewees permitted the interviews to be audio-recorded. As displayed in Table 46, the interviewees have different backgrounds within the entrepreneurship and SMEs financing community in the Kingdom. Two interviewees are in venture capital, two in angel investing, one in debt loan, and one in consulting, specializing in conducting financial modeling and due diligence for different investors in the Kingdom. All six interviewees hold leading positions, and all of them are from the private sector within the Kingdom.

A quick glance at the interviewees follows. Bader Abdulwahab, a Saudi citizen, is the chief executive officer (CEO) of Tarkiz Financial Consulting (http://tarkiz.com/), which for 12 years has been a successful boutique-size consultancy house in Saudi Arabia. Abdulwahab was previously a chief financial consultant in the Saudi Industrial Development Fund, which is the largest industrial development fund in Saudi Arabia within the Ministry of Finance. Nouf Alturki, a Saudi citizen, is the vice president of Rawabi Holding (http://www.rawabiholding.com), which is one of the largest investment holding companies in the Eastern Province of Saudi Arabia. In addition to her position in Rawabi Holding, Alturki is an angel investor focusing on Saudi women entrepreneurs' ventures. Rasheed Ballaa, a Saudi citizen, is a well-known venture capitalist in Saudi Arabia. His company N2V (http://www.n2v.com) is well known in MENA as the largest venture capital fund that focuses on web and mobile ventures. The fund invested in 40 ventures as of 2016, with five successful exits. Sami Khursani, a Saudi citizen, is known in Saudi Arabia in the field of assessing hydrocarbon industry ventures and is a founding member of Mawhiba, a Saudi national initiative to foster innovation and entrepreneurship. Khursani, as managing director of Saudi Aramco Entrepreneurship Center (http://waed.net), the largest center in Saudi Arabia, is a final decision-maker for granting non-collateral loans to entrepreneurs in the Kingdom. Mustafa Magar, a Canadian citizen, is the chief investment manager of Saudi Aramco Ventures (http://waed.net), which is the largest VC fund in Saudi Arabia, with known and disclosed capital. Magar has 28 years of experience in the VC field in both North America and Saudi Arabia. Bader Reziza, a Saudi citizen, is a well-known businessman and angel investor in Saudi Arabia. He is the CEO of Reziza Holding Company (http://www.reziza.com).

Table 46: List of interviewees

Interviewee	Position	Area of Expertise	Sector	Interview's Date
Abdulwahab, Bader	Due Diligence Financial / Legal	Tarkiz Financial Consultancy	Private	November 1st, 2016
Alturki, Nouf	Vice President, Rawabi Holding	Angel Investor	Private	November 13th, 2016
Ballaa, Rasheed	Chief Executive Officer, N2V	Venture Capital	Private	November 10th, 2016
Khursani, Sami	Managing Director, Saudi Aramco Entrepreneurship Center	Debt Loan (Non Collateral)	Private	November 3rd, 2016
Magar, Mustafa	Chief Investment Manager, Saudi Aramco Ventures	Venture Capital	Private	November 2nd, 2016
Reziza, Bader	Chief Executive Officer, Reziza Holding	Angel Investor	Private	November 13th, 2016

7.3 Interviews' Discussion Pillars and Questions

The interviews followed the format of unstructured to conversational in nature with open-ended questions. To make it easier for interviewees to provide the needed information, rapport was important here, as Walsh and Bull (2011) state, to help interviewees to talk and elaborate to offer insights that could have a high value to the study. Based on Rubin and Rubin's (2011) question structuring, the questions were grouped into three main categories. As illustrated in Table 47, for each pillar of discussion, which acted as guidance for the conversation, the three categories of questions were main question/questions, probes, and follow-up questions.

There are seven pillars of discussion. The first one is about the case existence, and if the case exists based on the research argumentation. The second pillar is on the survey's results, and whether the interviewees agree or do not agree on the output of the survey. This pillar also includes asking why a gap, if any, exists between entrepreneurs and investors' answers. Interviewees, in this part, may add their experiences and observations, which can be a valuable contribution to better understand the attractiveness factors. The third pillar is the subject of the due diligence impact and whether to include it in the training. Also, what may such a subject add toward better preparing the entrepreneur for dealing with the investor? The two main questions are: (1) does due diligence as a concept exist in current training programs, and (2) does the unavailability of due diligence in training play a role in the current status, which is the inability to convince investors to finance entrepreneurs.

Table 47: The interview's questions by utilizing Rubin and Rubin's (2011) structure

The Pillars of Discussion during the Interview	The Main Questions	Probes	Follow-up
1. The Case	Does the case exist as explained?	Why / why not it exists?	During Interview / Comment(s)
2. Attractiveness Factors	Do you agree on the findings? * Attractiveness of Entrepreneur * Attractiveness of Venture * Attractiveness of Business Plan	Why does a gap exist between entrepreneurs' and investors' answers?	During Interview / Comment(s)
3. The existence and impact of due diligence in training	Does due diligence as a concept exist in current training programs? Does the unavailability of due diligence in training play a role in such status?	Why?	During Interview / Comment(s)
4. Current Quality of Entrepreneurship Education & Training Programs	What do you think of the available training quality?	Why/ What is the problem of the available training programs?	During Interview / Comment(s)
5. The proposed new optimal training program	Do you agree on having a new training module?	In case of 'YES', what is the significance of having it? What is the foundation of this optimal program?	During Interview / Comment(s)
6. The willingness of collaboration in developing the proposed optimal training program	Are you ready to voluntarily collaborate in building it?	How?	During Interview / Comment(s)
7. The significance of the study	Do you see this study as important to the entrepreneurship ecosystem in Saudi Arabia?	What is its impact / significance? * To Saudi Economy * To Regulators * To Entrepreneurs * To Investors * To Enducational and Training Institutes	During Interview / Comment(s)

The fourth pillar is the qualities of the available entrepreneurship education and training programs in the Kingdom. The interviewees, with their rich experience, are likely to provide insights on the problems of the available training programs. The fifth pillar is about proposing a new optimal training program to better engage entrepreneurs with investors. The interviewees were asked to elaborate on their agreement or disagreement and how they may view the foundation of such a training module. The sixth pillar is about the possible willingness of investors to collaborate in developing the proposed optimal training program. The seventh pillar is about interviewees' opinions on the significance of conducting such studies to make a difference in entrepreneurship and SMEs

development in the Kingdom. It is important to obtain their perspective regarding the impact of such studies on the Saudi economy, regulators, entrepreneurs, investors, and entrepreneurship education and training institutes.

It is important to obtain more and deeper insights, from their practical experience and observations, on the rationale behind the existence of the gap between entrepreneurs and investors on the attractiveness factors, especially in the entrepreneur, the venture, and the business plan. These subject matter experts' contribution in answering the research questions and sub-questions is significant.

7.4 Pillars of Discussion: Interviewees' Feedback

7.4.1 The Case Existence

The interviewees agree that entrepreneurs in Saudi Arabia suffer on access to finance, which is a global challenge. This collective agreement aligns with Robson et al.'s (2013) statement that it is "a major hurdle in both developed and developing economies" (p. 349). Magar says that "we do not want to lose entrepreneurs, but unfortunately we miss a lot of potentially good opportunities." He added that this failure is because "entrepreneurs do not present the opportunities the way they should be presented." Abdulwahab's answer aligns with Magar, saying "Entrepreneurs do not do accurate presentations of the data, [or] show a clear idea of the market and funding requirement." Alturki, an angel investor, says, "The challenge is in the poor presentation of the financials and value proposition." She added that entrepreneurs, in general, are too conservative in sharing data with investors, which could be considered a trust issue.

Regarding presentations, Reziza says "Entrepreneurs do not know what investors are expecting to see," which he believes causes poor information presentation. Khursani says entrepreneurs' proposals are not well-received by investors because entrepreneurs do not present what satisfies investors, as "investors want to make sure they are gambling with the right horse." Ballaa aligns with other interviewees on this point, saying that the case exists because entrepreneurs present venture proposals that lack the "what-if scenarios, right selling to investors, (and) deep value proposition of ventures' proposal."

Regarding how to respond to the challenge of entrepreneurs needing to know what investors are expecting to see, Magar says the two parties "should talk to each other in the same language," which, according to Roberts (2010), is "specific, complex and extensive" (p. 1). Magar says this interaction is not being taught in the available

entrepreneurship training programs in Saudi Arabia. Khursani, in supporting this point, provides an example that most “entrepreneurs do not focus on value proposition and investors’ intimacy.” Ballaa comments that investors want to see “entrepreneurs who work hard and make solid sales to their ventures’ value proposition.” Based on his experience and observation, Ballaa says most entrepreneurs in Saudi Arabia, especially the startups, lack the necessary discipline and skills to deal with investors, and that what they need to learn is not available in the current entrepreneurship education and training programs. Alturki links the issue to the no-trust climate, but she notes that in many cases, entrepreneurs do not have the information that investors need. Alturki says such cases have embarrassed her in front of her team or the guest angel investors she usually invites when looking into venture proposals, and she has dropped the cases to prevent any embarrassment. Reziza blames inadequate entrepreneur training on poor materials and trainers who most likely have no business experience. Thus, those trainers do not have the knowledge that entrepreneurs need, which leads to poor venture proposal packaging.

Table 48: Feedback summary on the existence of the problem

Interviewee	**Does the case exist as explained?**	**Why it exists/ Comment(s)**
Abdulwahab, Bader	Yes	″Entrepreneurs do not do accurate presentations of the data, [or] show clear idea of the market and funding requirement.″
Alturki, Nouf	Yes	"The challenge is in the poor presentation of the financials and value proposition. They are too conservative in presenting data."
Ballaa, Rasheed	Yes	″No what- if scenarios, no focused selling to investors, no deep value proposition of ventures' proposal.″
Khursani, Sami	Yes	″Entrepreneurs’ proposals [are] not received well by investors ... investors want to make sure they are gambling with the right horse.” ″Entrepreneurs do not focus on value proposition and investors intimacy.″
Magar, Mustafa	Yes	"Entrepreneurs do not present the opportunities the way they should be presented."
Reziza, Bader	Yes	"It does exist. Entrepreneurs do not know what investors are expecting to see."

7.4.2 Attractiveness Factors to Investors

Interviewees agree that entrepreneurs' gap in understanding the key features that investors are seeking is not unexpected. Aside from the survey's "no results", regarding the attractiveness factors of the entrepreneur to the investor, Magar says that a gap exists and justifies the high failure rate. He rationalizes this gap by saying it proves his own theory that "the language both parties use is not the same." Elaborating further, Magar says "entrepreneurs focus on general character, which investors do not care about. Investors care about something else." Magar identifies the three main skill areas he usually cares about in an entrepreneur as problem-solving skills, execution and deal-closing skills, and management skills. Khursani's input on this point is that the gap exists because of the current quality of training and poor engagement of both parties. He adds that the gap demonstrates a need to work on entrepreneurs' mindset, requiring the engagement of entrepreneurs with professionals from the investment field during training.

Table 49: Feedback summary on the attractiveness factors on entrepreneurs

Interviewee	**Do you agree with the findings?**	**Why a gap exists between entrepreneurs' and investors' answers/ Comment(s)**
Abdulwahab, Bader	No results found	"No coaching, mentoring and professional training centers with real subject matter experts in investing who can tell them what investors want."
Alturki, Nouf	No results found	"They do not present the right or needed data. This is embarrassing to me in front of guest angel investors I invite. Thus, we just drop the case on the spot."
Ballaa, Rasheed	No results found	"The available training programs are not teaching entrepreneurs by business cases, real examples and interaction workshops with investors."
Khursani, Sami	No results found	"Good command of the English language or communication skills takes the entrepreneur to nowhere as he/she does not understand what the investor wants."
Magar, Mustafa	No results found	"The language both parties use are not the same."
Reziza, Bader	No results found	"Knowledge transferred is by academies who do not run business. Entrepreneurs started to realize this problem."

Khursani says, "Good command of the English language or communication skills takes the entrepreneur to nowhere as he/she does not understand what the investor wants." Ballaa elaborated on this point, saying that the findings are consistent in general since

“the available training programs are not teaching entrepreneurs by business cases, real examples, and interaction workshops with investors.” Thus, the training does not offer entrepreneurs an opportunity to know how investors view entrepreneurs, and what investors focus on.

The results of the survey regarding the attractiveness factors did not surprise the interviewees. They all agree on the points: (1) the specified items, which are entrepreneurs who are action oriented, have skills in the core project, and deliver a summary at the beginning of the relationship, are accurate for investors; (2) the project cost (ticket size) is not a problem; and (3) the significance of the mentioned business plan items is accurate to investors.

Elaborating on this part of the findings, Magar says, “the survey’s output […] reflects the actual situation.” Khursani says his center now faces this situation with entrepreneurs, noting “The entrepreneur must gain the investor’s intimacy. Intimacy is the key word here.” Thus, entrepreneurs should indicate their capabilities and believe in their project. In other words, Khursani says, the entrepreneur should look and be “business savvy.”

As for the attractiveness factors of the venture to the investors, Magar says the ticket size is not a problem if there is an actual opportunity. He added that investors usually are capable of funding cases that include co-funding with other investment agencies, but all depends on the availability of the opportunity, which can be viewed in the value proposition of the venture. Thus, entrepreneurs must first understand how investors view this critical issue, Magar says. Alturki and Reziza, who are angel investors, mentioned a key factor that supports Magar’s opinion. They said they usually invite other angel investors when they examine proposals, indicating that ticket size is not an issue to investors. Reziza says, “Angel investors gather to look at opportunities. The ticket size is last to consider. Opportunity and impact are the priorities."

To resolve the misunderstanding that entrepreneurs have on the ticket size issue, Magar suggests, “Entrepreneurs are to develop their ventures’ values with the investors from day one rather than at the end of the training. This cannot be found in conventional academic format training, which is similar all over the planet.” Khursani mentioned that ticket size is not a problem even in debt loan cases, as he can fund cases from 500,000 SAR to 5 million SAR. In fact, other agencies, such as the SIDF, may fund up to 50 million SAR, according to Khursani. He added that the attraction of ventures to investors depends on such issues as a desire to maximize their income, a message to deliver to society, or a desire to be innovators in technology. Thus, the ticket size point as

represented in the findings is true. Khursani continues by saying that in the worst financing scenario, the entrepreneur's project could be funded in phases.

For the attractiveness factors of the business plan to investors, the finding on the business plan revealed a problematic understanding in prioritizing its components based on what investors are seeking. Magar, after examining the result, says "pre-cooked business plan is not the tool that the investor would like to see. Yes, the training should tell the entrepreneur what the business is plan the investors wants to see, but to formulate it, they, both the entrepreneur and the investor, must talk together." The finding indicates this collaboration does not occur. This disappointing finding reveals that entrepreneurs are presenting business plans that do not function. Khursani says pre-prepared business plans are not considered, and, based on his experience, more than 95% of such business plans either contain imperfect information or are full of academic and theoretical discussions that have no connection with reality. Abdulwahab says most business plans to investors are redone after they accept the entrepreneurs and their ventures. He added that heavy due diligence is the foundation of the redone business plans as the report should contain precise and accurate information.

Table 50: Feedback summary on attractiveness factors on business plans

Interviewee	Do you agree with the findings?	Why a gap exists between entrepreneurs' and investors' answers/ Comment(s)
Abdulwahab, Bader	Yes	“Redo business plans to investors."
Alturki, Nouf	Yes	“I invite angel investors to look into proposals together. The ticket size is not an issue."
Ballaa, Rasheed	Yes	“The available training programs are not teaching entrepreneurs by business cases, real examples and interaction workshops with investors.”
Khursani, Sami	Yes	“The entrepreneur must gain the investor’s intimacy. Intimacy is the key word here.”
		“The entrepreneur should be business savvy.”
		“Good command of the English language or communication skills takes the entrepreneur to nowhere as he does not understand what the investor wants.”
Magar, Mustafa	Yes	“I believe in the reliability of the survey’s output is high as it reflects the actual situation."
		“Pre-cooked business plan is not the tool that the investor would like to see.”
Reziza, Bader	Yes	“Angel investors gather to look at opportunities. The ticket size is last to consider. Opportunity and impact are the priorities."

7.4.3 Existence and Impact of Due Diligence as Subject for Training

In regard to due diligence awareness, the survey’s finding was not a surprise to the interviewees. In fact, Magar says that investors who participated in the survey were generous in that only 73% of them stated that entrepreneurs do not know what due diligence means. Khursani, commenting on the response of the trainers that 95% say entrepreneurs either do not know or slightly know due diligence, says training institutes seriously need to revisit this issue, as it is vital for entrepreneurs to understand how investors work. Khursani’s point aligns with Feld and Mendelson (2013), who mention to nascent entrepreneurs how complex and mysterious the case is during negotiation on closing deals with investors.

The interviewees say the main item missing in the currently available entrepreneurship training is the due diligence that investors conduct. All of the interviewees agree that due diligence as a concept and practice is not being mentioned in the Saudi training programs. As revealed in Table 51, Magar says, “I did not see any training institute that

talks about due diligence in any of its training modules." Khursani's comments match Magar's, linking the problem to "training experts are the least business savvy." Consequently, Khursani says trainers cannot see the value of having due diligence in the training curriculums. Magar suggests the subject may be too complicated for trainers with no previous experience. This point aligns with Martin Zwilling (2015), who describes the investors' due diligence as secretive and feared.

The researcher asked the interviewees about the importance of due diligence to entrepreneurs. Ballaa, in a simple yet clear statement during his interview session, says entrepreneurs should explore "what-if" scenarios during the vital due diligence exercise in order to formulate a solid business plan. Abdulwahab's statement fully supported Ballaa, saying "Entrepreneurs should wear the hat of the investors and criticize their venture business plans. They must know the due diligence, which is about the 'what-if' scenarios." Alturki says due diligence awareness and even practice is mandatory as "It builds the entrepreneur's investment maturity." Reziza's feedback aligns with the others as he says "at least it will show entrepreneurs how investors make decisions." The emphasis here aligns with Harrison and Mason's (2017) advice that entrepreneurs must know the decision-making factors that investors rely on.

One last point worth mentioning is from Magar. Magar says including due diligence as a concept in the training programs is not enough, as "investors who conducted due diligence, where they succeed and failed, can provide valuable knowledge to entrepreneurs of what to do and what not to do based on their practical experiences." This situation may reflect Hoque et al.'s suggestion (2016) that entrepreneurs with less education are likely to suffer "less opportunity to build up a good relationship with fund suppliers" (p. 6). Khalid Sulaimani (2015) explains the importance of having a strong relationship with investors as they have many questions to ask entrepreneurs.

Table 51: Feedback summary on the due diligence significance

Interviewee	Does due diligence as a concept exist in current training programs?	Does the unavailability of due diligence in training plays a role in such status?	Why / Comment(s)
Abdulwahab, Bader	No	Yes	“Entrepreneurs should wear the hat of the investors and criticize their ventures' business plans. They must know the due diligence which is about the 'what-if' scenarios."
Alturki, Nouf	No	Yes	“It is a must. It builds the entrepreneur's investment maturity."
Ballaa, Rasheed	No	Partially, Yes	“No 'what- if' scenarios, no focused selling to investors, no deep value proposition of ventures' proposal."
Khursani, Sami	No	Yes	“Training experts are the least business savvy.”
Magar, Mustafa	No	Yes	“I did not see any training institute that talks about due diligence in any of its training modules." “Investors who conducted due diligence, where they succeed and failed, can provide valuable knowledge to entrepreneurs of what to do and what not to do based on their practical experiences."
Reziza, Bader	No	Yes	“Definitely it will help. At least it will show entrepreneurs how investors make decisions."

7.4.4 Quality of Entrepreneurship Education and Training Programs

All of the interviewees agree that the current entrepreneurship training programs in Saudi Arabia are poor in materials, methods of delivery, and competencies of many of the available instructors. Fayolle (2009) says there is a lack of qualified faculty to teach entrepreneurship.

Magar says “The current entrepreneurship training is not telling entrepreneurs the rules of the game. The language here is not academic, as we see, but pure business.” He adds that the available entrepreneurship training programs are not addressing the actual desires of investors and the true ambitions of entrepreneurs. Khursani says “Training institutes look to quick wins,” providing packaged generic materials such as communication skills, pitches, and business plan formulation. Such issues do not get the attention of the investors as they are not practical. Mr. Khursani added, “I am not satisfied with the available training, not in the kingdom, not in MENA and even not in the world.” Fayolle (2009) explains that because of a lack of a method to evaluate the efficiency of such programs and their impacts, “we know relatively little about the effectiveness of

these types of programs" (p. 377). Thus, Khursani's disappointment is not likely to be surprising.

What explains this situation in Saudi Arabia? Khursani says training experts are not "business savvy," which has an adverse effect on entrepreneurship training quality. Magar observes that current entrepreneurship training programs in Saudi Arabia are models copied from other areas of the world that were developed 20 years ago and are still in use. He says this approach does not work anymore when seeking knowledge and training where a new method is urgently needed, especially for Saudi Arabia. Additionally, Magar highlights the nature and competencies of the available instructors. He says, "I see people giving training with no VC experience. For instance, how do you expect that a doctor, who will do an operation for a patient, does not know anything practical about the operation?"

Additionally, academic and training institutes are not communicating with investors to help them in compiling the training material for lecturing. Magar says "Investors should be consulted in all phases of entrepreneurship training." Abdulwahab says training is a "one-way communication with no application. Training should include data collection, analysis, and use research methods. It should be two-way communication within workshops, meeting real experts. The trainer should be instructors and mentors with real experience." Alturki says the training output is fragile, as she expects to build the investment maturity in entrepreneurs more than anything else. Having an innovative idea is not enough, she adds, if it does not get translated into a profitable business. Reziza believes that the current poor performance of the available training programs is because "people from academia who do not run business are handling the process of knowledge transfer. Entrepreneurs started to realize this problem."

Based on the study's findings, training institutes are likely not delivering the results that investors are seeking. Consequently, investors might lose profitable deals. Magar insists that training institutes should help entrepreneurs learn to speak the investor's language. Magar added that the available "entrepreneurship academic curriculums are not more than a 101-level knowledge in the world of real business."

Table 52: Feedback summary on the quality of available training programs

Interviewee	What do you think of the available training quality?	Why / What is the problem of the available training programs?
Abdulwahab, Bader	Poor	“One-way communication with no application. Training should include data collection, analysis and use research methods. It should be two-way communication within workshops, meeting real experts. The trainer should be instructors and mentors with real experience."
Alturki, Nouf	Poor	“It is not enough, output is very weak, it takes them long time to build maturity in entrepreneurs and the result is very few matured entrepreneurs."
Ballaa, Rasheed	Poor	“The current culture of entrepreneurs training is not helping entrepreneurs in dealing with investors." "Maturity and understanding of investors' aims from investing."
Khursani, Sami	Poor	“Training institutes look to quick wins.” “I am not satisfied with the available training, not in kingdom, not in MENA and even not in the world.” “Focus on issues that investors do not care about."
Magar, Mustafa	Poor	“The current entrepreneurship training is not telling entrepreneurs the rules of the game. The language here is not academic, as we see, but pure business.” “Run by trainers who do not know business." “Old materials and ways of delivery."
Reziza, Bader	Poor	“People from academia who do not run business are handling the process of knowledge transfer. Entrepreneurs started to realize this problem."

7.4.5 Need for Proposed New Optimal Training Modules

The sixth pillar of discussion is the proposed new optimal training program. The first part is whether interviewees agree on having an additional training module for teaching entrepreneurs how to better engage with investors. The second part is to identify the foundations of this proposed module.

Despite the output of the survey, all interviewees agree on this proposal and support the research’s argumentation. Khursani states that “without aligning the interests of both parties, entrepreneurs will keep complaining, and investors will keep rejecting.” Reziza believes the time is right to start working on the proposed module, as he says,

“Entrepreneurs must learn real knowledge. All are losers because of limited foresight.” Magar says “it is the time to establish new knowledge structure in our ecosystem. The government is asking itself serious questions mainly about what is needed in pre-funding.” Thus, training should take a new disruptive approach, as Magar calls it, toward developing an “investor-based business case” that simply involves answering investors’ questions to help both parties succeed. Here, the insights of the three interviewees reflect Harrison and Mason’s finding (2017) that entrepreneurs need to know how investors make decisions on investing. Ballaa focuses on building “the investment maturity and discipline in entrepreneurs,” which aligns with Brush et al. (2003b), who highlight the dripline buildup in entrepreneurship education. According to Ballaa, entrepreneurs “need different types of studies, [to] assess real examples in workshops with investors” to help them deal better with investors.

The interviewees elaborated on what they would like to see in such a new optimal training program. Magar says it should be, as proposed, constructed correctly and based on investors’ perspectives from the start. Khursani’s feedback is that the proposed training program should be “a dual-dimensions module focusing on the investors’ desire and the relation between the entrepreneurs and the investors in order to gain the investors’ intimacy.” He says “what entrepreneurs need is not available in academic institutions’ textbooks.” Abdulwahab says it is time to “build a practical training instead of the available boring theoretical training.”

Abdulwahab believes the proposed module should be based on: (1) mentoring and coaching workshops with investors, (2) teaching the investors’ perspective (due diligence awareness), and (3) teaching how to conduct field studies, search for information, and discuss numbers. In regard to the workshops climate, Ballaa emphasizes building teamwork spirit in entrepreneurs. Alturki agrees with Abdulwahab on teaching how to dig for information. She added that the proposed module should also consider helping entrepreneurs to learn how to trust investors and share the information they have about their ventures’ proposals. Alturki insists that business schools should manage this new type of training, as they are the natural place for such education and training. Khursani says the base should be on constructing a solid value proposition for investors to focus on. Reziza emphasizes that this module should be based on a workshop where entrepreneurs meet mentors who are the investors. Ballaa’s opinion aligns with Reziza’s, and he adds that mentors should be the ones who succeed in exits. Those mentors are likely to have a better frame of experience to help entrepreneurs to assess their business proposals before contacting investors.

Table 53: Feedback summary on the proposed optimal training module

Interviewee	Agrees on hainge a new training module?	Why / Significance	Suggested foundations for the optimal training module
Abdulwahab, Bader	Yes	“Build the practical training instead of the available boring theoretical training."	1. Mentoring and coaching workshops with investors. 2. Teach wearing the investors' hats: due diligence Awareness. 3. Teach how to do field studies, search for information and talk numbers.
Alturki, Nouf	Yes	“Business schools should have it."	1. Teach how to dig for information. 2. Build bravery in entrepreneurs to share data.
Ballaa, Rasheed	Yes	“Build the investment maturity and discipline in entrepreneurs." “Entrepreneurs need different type of studies, assess real examples in workshops with investors."	1. Accelerate the investment mindset and maturity. 2. Build the teamwork spirit.
Khursani, Sami	Yes	“Without aligning the interests of both parties, entrepreneurs will keep complaining and investors will keep rejecting."	1. Value proposition. 2. A dual-dimensions module focusing on the investors’ desire and the relation between the entrepreneurs and the investors in order to gain the investors' intimacy.
Magar, Mustafa	Yes	“It is the time to establish new knowledge structure in our ecosystem. The government is asking itself serious question mainly about what is needed in the pre-funding." “We do not want to lose entrepreneurs, but unfortunately we miss a lot of potentially good opportunities."	1. Non-textbook module. 2. Build an "investor-based business case".
Reziza, Bader	Yes	“Entrepreneurs must learn real knowledge. All are losers because of limited foresight."	1. Workshops training. 2. Run by investors.

7.4.6 Collaboration to Develop Proposed Optimal Training Module

All of the interviewees believe in the added value of having investors participate in training entrepreneurs. However, regarding their experience in participation on training, the interviewees responded that they were never invited[30] to participate in any available training programs through evaluating teaching materials, mentoring, or lecturing. Magar,

[30] All the interviewees escaped from answering the question of why training institutes do not invite them to participate, except for Magar. He believes that trainers and people in charge in training institutes are likely not in favor of communicating with investors to eliminate any negative affect on their prestige or for job security reasons. Magar claims that trainers know they are doing a job they should not do at the moment as they are not qualified enough.

for instance, says, “Through my 25-plus years of activities in the VC field, whether in North America or here in Saudi Arabia, there was no single training institute that asked me to participate in their training. This happened, probably, to most investors.” Khursani says that none of the available training programs invited him to visit or view what is occurring in the field of entrepreneurship education and training. Such feedback could explain why Fayolle (2009) highlights the problem of lacking qualified faculty to teach entrepreneurship.

In general, all the interviewees expressed the willingness to participate in any training program that adds value, mainly in increasing the volume of useful deal flow, as stated by all interviewees. Such willingness of investors to participate in training is likely to help entrepreneurs, especially nascent ones, to build social capital that may lead them to improve their startups, according to Davidsson and Honig (2003). However, as revealed in Table 54, three out of the six interviewees said they are willing to participate in whatever is needed to build such an optimal training program. Khursani says, “I want to be part of its development.” Magar says he is willing to participate in building such a training program. Abdulwahab offered an intriguing answer, saying, “Sure, I can participate by the knowledge I have. Part of our CSR, we provide coaching and mentoring to entrepreneurs free of charge.” The other three interviewees expressed their willingness in participating mainly in mentoring, as they believe they are useful in this field. It is noticeable that almost all of the interviewees agreed on participation by mentoring and coaching. Magar elaborated that his participation would ease his work by opening doors for him to know about opportunities from the beginning rather than at the end of the entrepreneur training. Reziza explains that he is better as a mentor, especially in providing data about the market. Such a contribution is more likely to be valuable, as the available public market information in the Kingdom is scarce and often unreliable (Tarkiz, 2012, p. 30). Table 54 summarizes the most relevant comments from the interviewees in expressing their willingness to participate in developing and operating the proposed optimal training program.

Table 54: Feedback summary on collaborating in the development of the new training module

Interviewee	Are you ready to voluntarily collaborate in building it?	How / Comment(s)
Abdulwahab, Bader	Yes, full	“Sure, I can participate by the knowledge I have. Part of our CSR, we provide coaching and mentoring to entrepreneurs free of charge."
Alturki, Nouf	Yes, partial	“I am ready to participate in mentoring."
Ballaa, Rasheed	Yes, partial	“Some lecturing plus sharing my knowledge and networking entrepreneurs with the right mentors and investors."
Khursani, Sami	Yes, fulll	“I want to be part of its development."
Magar, Mustafa	Yes, fulll	“Absolutely and in all of its components, including lecturing and mentoring."
Reziza, Bader	Yes, partial	“I prefer to be a mentor, especially in my field, which I am good at."

7.4.7 Significance of the Study: Interviewees’ Verdicts

The seventh pillar of the interview is about the impact of the study and its significance. Based on the interviewees’ feedback, impacts are likely to appear on several stakeholders within the entrepreneurship and SMEs development ecosystem in the Kingdom.

7.4.7.1 Significance to the Saudi Arabian Economy

For the entrepreneurship and SMEs development ecosystem, Ballaa says action is crucial as “Entrepreneurship and SMEs development in the country are at risk of mortality.” Linking to Ballaa’s concern, Reziza says such studies may help by their impact in “increasing the number of funded ventures and build(ing) professional and serial entrepreneurs over a short period of time.” Regarding the study, Magar says it is “very alarming that we have a problem.” Abdulwahab expressed his appreciation that this study is important to the ecosystem, and it appears to him as “a feasibility study.” Such feedback is likely to reflect the current situation in the Kingdom, as according to Alsulaiman, who was the governor of the SMEs Authority in Saudi Arabia (Alriyadh

Newspaper, 2016), only 2% of available funding was assigned to entrepreneurs as of 2016. This number is not far from the 1.7% actual lending as of 2010 (Rocha et al., 2010).

The interviewees agree that the value of such proposed training module would significantly increase the amount of potential funding, which would be reflected in building more SMEs. Additional SMEs would contribute tangibly to the private sector by helping to diversify the economy and create jobs in Saudi Arabia. This issue cannot be compromised since relying only on oil places the whole economy at risk due to oil price fluctuations (Al-Zahrani, 2015). This factor aligns with the plan announced by the previous governor of the SMEs Authority in Saudi Arabia for entrepreneurs funding to soon reach 20% (Alriyadh Newspaper, 2016). Khursani states that “the study addresses the actual problem not only entrepreneurs face, but also investors and training institutes.” Magar explains that having a program where entrepreneurs learn how to deal with investors and even meet the investors as trainers or mentors, for example, is more likely to help in increasing the volume of the right and attracted cases. Mr. Magar adds, “Filtration rate is 97% out, but if we have this new approach, it means there is juice in this 97%. This juice is not less than 30% that can be recycled back into the deal flow for potential investment.” He says this approach helps the ecosystem in general by allowing investors to continue in business, entrepreneurs to develop their SMEs, and training institutes to add business. Mason and Harrison (2010) say that better education and experience lead to higher performance in the execution of both pre- and post-investment processes, which supports Magar’s argument. Reziza says “Entrepreneurs must learn real knowledge. All are losers because of limited foresight.” Reziza assures that such a new approach in training will satisfy all stakeholders in business. Table 55 lists the most critical comments of the interviewees.

Table 55: Important comments on significance to the Saudi economy

Interviewee	What is the impact/ significance to the economy?
Abdulwahab, Bader	“The study is a feasibility study for me."
Alturki, Nouf	“The study is important for us in Saudi Arabia."
Ballaa, Rasheed	“We need to have something that makes a quick impact. Entrepreneurship and SMEs development in the country are at risk of mortality."
Khursani, Sami	“The study addresses the actual problem not only entrepreneurs face, but also investors and training institutes."
Magar, Mustafa	“Very alarming that we have a problem." “Filtration rate is 97% out, but if we have this new approach, it means there is juice in this 97%t. This juice is not less than 30% that can be recycled back into the deal flow for potential investment. This helps the ecosystem in general as investors will continue to be in business, entrepreneurs to develop their SMEs and training institutes to make business too.”
Reziza, Bader	“The impact is huge. It will help in increasing the number of funded ventures and build professional and serial entrepreneurs over a short period of time." “Entrepreneurs must learn real knowledge. All are losers because of limited foresight."

7.4.7.2 Significance to the Regulators

As a value for regulators in Saudi Arabia, Magar believes this study is most likely to help the Saudi Ministry of Commerce and Investment, which is working on reevaluating the issue of poor entrepreneurship and SMEs development performance. He says the findings of this study may “(spotlight) to the regulator while dealing with the challenges that entrepreneurship and SMEs development ecosystem faces right now.” Abdulwahab agrees on this point, saying “it should be presented to the new established SMEs Development Association, which is under the Ministry of Commerce and Investment.” Khursani suggests that moving in this direction, the study could not only build the optimal training module, but also may evolve to become “a potential assessment tool for regulators to evaluate progress and tangible results in entrepreneurship training programs.” Magar, Abdulwahab, and Khursani recommend that a summary of the study

be delivered to the relevant official parties who work on ecosystem development. Table 56 lists the most critical comments of the interviewees.

Table 56: Important comments on significance to the regulators

Interviewee	What is the impact/ significance to the regulators?
Abdulwahab, Bader	“It should be presented to the new established SMEs Development Authority, which is under the Ministry of Commerce & Investment."
Alturki, Nouf	N/A
Ballaa, Rasheed	N/A
Khursani, Sami	“A potential assessment tool for regulators to evaluate progress and tangible results in entrepreneurship training programs."
Magar, Mustafa	“(Spotlight) to the regulator while dealing with the challenges that entrepreneurship and SMEs development ecosystem faces right now.”
Reziza, Bader	N/A

7.4.7.3 Significance to Entrepreneurs

For entrepreneurs, Khursani says that “investors have a different psychology, which entrepreneurs need to know at least its basics.” Harrison and Mason (2017) say that entrepreneurs need to know what investors rely on while making their decisions. Such knowledge is likely to help entrepreneurs succeed in attracting investment, especially when what investors want is described as being ambiguous and irregular (Acs, 2010). Magar elaborates on this important issue by saying, “Investors will never invest in a venture of an entrepreneur who does not know how to invest.” Magar adds that “entrepreneurs (need) to understand how to build a relationship with investors,” which would save entrepreneurs a great deal of time they could use to focus on their ventures. He says, “Can you imagine the frustration (of) an entrepreneur (who) spends two or three months in training and then fails at the end in getting funded? Your proposal will solve this problem because the entrepreneur will know the potential results from Day One.” This point reflects failure due to the unawareness that for investors, the high cost of finding information within the risk aversion climate makes it difficult to them to invest in new SMEs (Robson et al., 2013). Ballaa says that stakeholders need to “build the investment maturity and discipline in entrepreneurs.” Thus, entrepreneurs need a new

and different quality of knowledge in addition to skills. Becker (1962) mentioned long ago that there is a need to include intangible qualities, such as habits and creativity, as differentiating factors for better production. Ballaa adds that the new training module could help in teaching how to build the trust between both parties as “when trust is built in entrepreneurs, they are most likely will be capable of contacting more investors here in Saudi Arabia as well as abroad.” This expansion in learning is positive for all stakeholders, as Schütt (2003) says that “educational expansion does contribute to output growth” (p. 53). Furthermore, according to Bosma et al. (2003), most promising startups are created by individuals who have links with businesses. Linking with investors in such a training module helps entrepreneurs. Table 57 lists the most critical comments of the interviewees.

Table 57: Important comments on significance to entrepreneurs

Interviewee	**What is the impact/ significance to entrepreneurs?**
Abdulwahab, Bader	N/A
Alturki, Nouf	N/A
Ballaa, Rasheed	“Builds the investment maturity and discipline in entrepreneurs." “When trust is built in entrepreneurs, they most likely will be capable of contacting more investors here in Saudi Arabia as well as abroad.”
Khursani, Sami	“Investors have a different psychology, which entrepreneurs need to know at least its basics.” “The proposed flow of relation is most likely tol help entrepreneurs to understand how to build a relationship with investors.”
Magar, Mustafa	“Investors will never invest in a venture of an entrepreneur who does not know how to invest.” “Can you imagine the frustration (of) an entrepreneur (who) spends two or three months in training and then fails at the end in getting funded? Your proposal will solve this problem because the entrepreneur will know the potential results from Day One.”
Reziza, Bader	N/A

7.4.7.4 Significance to Investors

For investors, all interviewees say the existence of such a training module, with investors participating, is more likely to lead in increasing the potential deal flow for them in more efficient time. Magar elaborated on this point by saying that the proposed module will help investors mainly in time savings. Allman (2015) highlights this important point when he states that entrepreneurs need to know that time is always precious to investors. Magar elaborates on this point by saying “people may think investors are losing their time when they spend it in such training activities. This is not true, in fact, such a program may save much time for them.” Magar expresses the value for investors in three main areas. First, “it reflects the true relationship between the two parties from the start of the relation, which is based on building value compared with what is happening now.” Second, “the value-building proposition is built on steps, which is more matured and solid for both parties as trust needs time to build.” Third, such engagement is likely to “ease and maximize the results for investors as we work on reducing the resistance of entrepreneurs during negotiations.” Allman (2015) supports Magar’s three points in saying that with equity investors, the valuation discussion starts at a very early stage to prevent any financial gap in perceived value. Table 58 lists the most critical comments of the interviewees.

Table 58: Important comments on significance to investors

Interviewee	What is the impact/ significance to investors?
Abdulwahab, Bader	Better deal flow
Alturki, Nouf	Better deal flow
Ballaa, Rasheed	Better deal flow
Khursani, Sami	Better deal flow
Magar, Mustafa	Better deal flow "People may think investors are losing their time when they spend it in such training activities. This is not true, in fact, such a program may save much time for them." "It reflects the true relationship between the two parties from the start of the relation, which is based on building value compared with what is happening now." "The value-building proposition is built on steps, which is more matured and solid for both parties as trust needs time to build." "Ease and maximize the results for investors as we work on reducing the resistance of entrepreneurs during negotiations."
Reziza, Bader	Better deal flow

7.4.7.5 Significance to Entrepreneurship Education and Training Institutes

For the entrepreneurship education and training institutes, Alturki offers a valuable insight. She says business schools should have such a new training model because angel investors in Saudi Arabia are focusing mainly on entrepreneurs who are coming from universities. Although such institutes have business schools and even entrepreneurship clubs, she says the students are not prepared to deal with investors. This lack of preparation could explain Achard's point (2010) when he said that something is missing or incomplete in entrepreneurship training programs. Unachukwu (2009) indicates the same situation in Nigeria, but he defends such missing knowledge since entrepreneurship education and training is still new. Thus, Alturki believes that such a

program should be part of business schools' curriculum in addition to other courses in enterprise and entrepreneurship.

Magar says the academic institutions would have a critical role in constructing the subject course but within specific boundaries. He adds that "Training institutes should manage the information and share it with entrepreneurs who will use this information when dealing with investors." Magar focuses on the significance of academic and training institutes as they may lead quality training, such as what he calls the "investor-based business case." He says the institutes also can spread the climate of knowledge sharing that will significantly help in resolving and even developing innovative solutions to problems not only being faced in training but even in the entrepreneurship ecosystem. Magar says "quality knowledge is not a choice anymore, but mandatory in Saudi Arabia, and education and training institutes can play a significant role in this regard." Khursani offers a crucial statement about these institutes' role by saying "We need to build a long-life knowledge. This is not in books but communication with different parties and sharing knowledge." According to Khursani, this point illustrates the critical significance of quality, yet different knowledge in entrepreneurship and SMEs development that such entities can build in the Kingdom. Khursani's comment could explain why Johannisson (1992) says that "formal training is inappropriate" (p. 5). Considering the educational materials to be more of an "action-based entrepreneurship education program" is a valid point (Rasmussen & Sørheim, 2006, p. 185).

Magar expresses his understanding that educational institutes do not move quickly, which aligns with Hannan (2005), who states that such institutes usually resist change. Magar says "It is time to come up with the "Version 2" knowledge to reduce the failure rate and increase deal flow. This study will disrupt for better results." He adds that "This study has a significant impact on the way we dispense information, develop projects with entrepreneurs and the efficiency of transiting to knowledge-based center." Khursani says the study is most likely to "set a new stage for coming up with a different kind of training, which is needed desperately in Saudi Arabia." Alturki notes the significant role of universities in helping the ecosystem, wanting the new training concept to be implemented there, as she says angel investors in Saudi Arabia "focus on universities' student entrepreneurs." She observes that Saudi business schools do not teach students how to deal with investors. Abdulwahab aligns with Alturki, saying "this study should be shared with business schools in Saudi Arabia, so they may move forward in considering the nature of this study to work on assessing and resolving related issues within the entrepreneurship education in the Kingdom." Ballaa says it is important to consider new

training subjects. Reziza mentions that such new subjects will keep training institutes in business in the long run, which is an important point to support the future of these institutes.

Table 59: Important comments on significance to entrepreneurship education and training institutes

Interviewee	What is the impact/ significance to entrepreneurship education and training institutes?
Abdulwahab, Bader	“This study should be shared with business schools in Saudi Arabia, so they may move forward in considering the nature of this study to work on assessing and resolving related issues within the entrepreneurship education in the Kingdom.”
Alturki, Nouf	“Engage business schools for quality deliverable. Business schools should have it.”
	“Saudi business schools do not teach students how to deal with investors."
	“Angel investors in Saudi Arabia are focusing mainly on entrepreneurs who are coming from universities."
Ballaa, Rasheed	“Evolvement in education and training."
Khursani, Sami	“We need to build a long-life knowledge. This is not in books but communication with different parties and shar(ing) knowledge.”
	“Set a new stage for coming up with a different kind of training, which is needed desperately in Saudi Arabia.”
Magar, Mustafa	“Training institutes should manage the information and share it with entrepreneurs who will use this information when dealing with investors.”
	“Quality knowledge is not a choice anymore, but mandatory in Saudi Arabia, and education and training institutes can play a significant role in this regard."
	“It is time to come up with the ‘Version Two’ knowledge to reduce the failure rate and increase deal flow. This study will disrupt for better results.”
	“This study has a significant impact on the way we dispense information, develop projects with entrepreneurs and the efficiency of transiting to knowledge-based center.”
Reziza, Bader	“New training subjects will keep these training institutes in business on the long run."

From the comments mentioned above, it appears that entrepreneurship education and training in Saudi Arabia suffers deficiencies, as Kelley and Thomas (2011, p. 90) say is

occurring in many countries worldwide. A transformation of training in terms of what and how is mandatory would have a tangible effect on the output of the SMEs development ecosystem (Kirby, 2004). Such a change is supported by writers such as of Henry et al. (2005), Nkirina (2010), Fayolle (2009), Lima (2012), and Fairlie et al. (2012). Table 59 lists the most critical comments of the interviewees.

7.5 Summary

This chapter presents the qualitative part of the study in terms of data collection and analysis. Rapport interviews were conducted with subject matter experts in the field of entrepreneurs and SMEs financing in Saudi Arabia. This chapter includes five main sections, which are (1) introduction, (2) The Interviews' Conduction, (3) The Interviews' Discussion Pillars and Questions, (4) the Data Collections on Pillars of Discussion, and (5) Summary.

The researcher interviewed a selected set of well-known investors from different entities in the Kingdom. As mentioned previously, the interview's questions were rapport and open-ended in order to gain deeper insights from the interviewees about the research subject. Their practical knowledge and insights from the entrepreneurship and SMEs financing community in the Kingdom may contribute much about the research subject, and their suggestions and recommendations may strengthen the justification for having the subject training program. The contribution of the interviewees in completing this study is significant. The obvious output of the interviews is that all interviewees were not surprised by the study's findings. They all expressed their appreciation for covering this critical subject as none did previously, according to their knowledge.

The next chapter covers both the quantitative and the qualitative data findings for discussion. Also, it examines the proposed optimal training module.

CHAPTER EIGHT: FINDINGS' DISCUSSION, PROPOSED OPTIMAL TRAINING MODULE, AND THE STUDY VALUE

8.1 Introduction

This chapter aims to discuss the findings of the research from both instruments that were used to collect the needed data, the questionnaire and the qualitative interviews. However, the discussion will take the direction toward proposing the elements of knowledge or the components of the proposed optimal training module to help in reducing the impact of the credit rationing on entrepreneurs, mainly nascent, and SMEs.

In addition to this short introductory section, this chapter contains six other sections. They are: (1) keynotes from the quantitative part of the study, (2) keynotes from the qualitative part of the study, (3) the proposed optimal training module structure, (4) issues related to delivering the optimal training module, (5) the value of the study according to the verdicts of the interviewees, and (6) the chapter's summary.

8.2 Keynotes from the Quantitative Part of the Study

Filho et al. (2013) say that "Statistical inference is based on the idea that it is possible to generalize results from a sample to the population" (p. 32). Although the sample size is a significant issue in statistical studies, "There is no magic number that tells you how large a sample should be to give valid results" (Sense About Science, 2010, p. 7). However, this study faced the challenge of having a low number of responses, which is likely to affect the outcome of the first part of the research. As a result, and as revealed in Chapter 6, the output of the questionnaire did not indicate a large amount of significant evidence related to the main research question and sub-questions. Eisenhardt (1989) says that a quantitative evidence is likely to act as a significant signal. Little evidence appeared through testing the outcome of the questionnaire that is likely to be considered as a significant signal, mainly related to information asymmetry, regarding the venture and the quality of venture's clarity in the business plan, and the quality of entrepreneurship education and training programs in the Kingdom. With the support of voices in literature (Cohen & Kador, 2013; Dimov & Shepherd, 2005; Fairlie & Holleran, 2012; Fayolle, 2009; Henry, Hill, & Leitch, 2005; Hoque, 2016; Lima et al., 2012; Nkirina, 2010), who recommend transforming entrepreneurship education and training, this sparse questionnaires' evidence is likely to support the study argumentation but without

generalizing the output at this stage. The sample does not likely represent the general population of entrepreneurs in the Kingdom.

In the second part of the study, which is the qualitative interviews, the interviewees accepted the few results out of the questionnaire that are counted as significant. Although all six of the interviewees expressed their happiness that this subject is being examined, they expected to observe more evidence arising from the questionnaire (see Table 60). A significant note from the interviewees is that the absence of evidence related to the entrepreneur's characteristics and skills may be related to questions on the survey relying on ideal characteristics and traits that current training program focus on. Such characteristics and skills are known to all, which caused no deviation in answers. One of the interviewees, Mustapha Magar, adds that "Investors usually focus on few issues in the entrepreneur, such as management skills and [the] ability to negotiate and close deals, where the available training courses in the Kingdom do not give them the right space of discussion." For the negotiating and closing deals skills, Magar's comment aligns with Dimov and Shepherd (2005), who indicated that this challenge is due to poor quality of entrepreneurs' competencies, and "[investors] are often unable to negotiate acceptable investment terms and conditions with [such] entrepreneurs" (p. 1). Domingo (2015) supports this point as his first focus usually is on the entrepreneur's practical management experience, which supports Magar's perception. Based on Volkmann et al. (2010), three categories of entrepreneur characteristics are behavioral, functional, and traits. Magar is likely referring to the behavioral competencies of the entrepreneur. Actually, Magar's perspective has a high degree of alignment with a recent study by Kerr et al. (2017) of the Harvard Business School, in which they reviewed extensive literature since 2000 on the same issue. They observed among entrepreneurs many common traits and characteristics but also many disagreements. These findings led them to label entrepreneurial populations as "[Main] Street Entrepreneurs" versus those who are "backed by venture capitalists" (p. 1). They also mentioned that "the economics literature holds such a deep focus on the creation of ventures [leading to] miss fruitful opportunities to learn from personality studies and contribute to them" (Kerr et al., 2017, p. 37).

Table 60: Significant evidence from the questionnaire that was presented to the interviewees

Related area	Potential improvement areas	Questions with significant answers	Interviewees Feedback
Information asymmetry	Attractiveness of venture to investor	Question: “The timing for the idea is the first thing an investor looks at.” Question: “The size of funding ticket of a venture that attracts the investor in the Kingdom more is.”	Agree to be significant Agree to be significant
Information asymmetry	Attractiveness of business plan to investor	Question: “For an investor, the venture’s clarity can be seen in the business plan through” Question: “For an investor, a proven business model with a minimum of a one-year track record is important to appear in the business plan.”	Agree to be significant Agree to be significant
Information asymmetry	Due diligence	Question: “Do you see entrepreneurs, in general, know what ‘Due Diligence’ investors conduct means?”	Agree to be significant
Education and training	Quality of training Collaboration between trainers and investors	Question: “In general, how do you see the quality of entrepreneurship education and training available in the Kingdom?” Question: “Investors and trainers communication’s nature”	Agree to be significant Agree to be significant

8.3 Keynotes from the Qualitative Part of the Study

Statistical significance, in a study, is likely to provide a partial picture (Loannidis, 2005). Thus, asking subject matter experts to elaborate on the case and the statistical results and to contribute by critical insights is vital to make this picture clearer. Rubin and Rubin (2011) state that the in-depth interviews are likely to provide an opportunity to learn more about a case. According to Loannidis (2005), interviewees’ opinions are likely to help in placing the results of a quantitative study into a frame or a context. That was the case in the second part of this research. As revealed in the previous chapter, the interviewees contributed valuable insights about the case of this study.

The researcher, through more conversational interview sessions, introduced the research argumentation of a need to have a new entrepreneurship training optimal program to help entrepreneurs to better engage with investors. Also, the researcher presented the findings of the survey, which was conducted before the interviews. Despite

the few significant findings in the survey, interviewees expressed their acceptance of them and their appreciation for such a study to occur in Saudi Arabia. Interviewees recognize the challenge that entrepreneurs face in dealing with investors about financing in the Kingdom. The problem, according to their answers, can be articulated in aligning the entrepreneurs and investors toward a successful relationship through an optimal training program that should be innovative and disruptive in concept, materials, and delivery.

What the interviewees offered, in terms of information based on their experience, can be counted as important hints toward identifying the components of the proposed optimal training module. In addition to their agreement that entrepreneurship education and training need to evolve, which aligns with many voices in literature as mentioned previously, specific skills were mentioned that they care about to be in the entrepreneurs. If we refer to the Volkmann categorizations (2010), the mentioned skills are more related to the behavior category, such as management skills, than the other two categories, which are functional and traits.

Additionally, the awareness of the due diligence process, which investors conduct when they examine potential ventures toward reaching to a decision, is a vital issue that is likely to help entrepreneurs to learn how investors make their decisions. Based on this knowledge, entrepreneurs may work on preventing information asymmetry that investors suffer when dealing with entrepreneurs. The value of human capital development appears as better education and experience lead to higher performance in the execution of both pre- and post-investment processes (Mason & Harrison, 2010).

The discussion of the qualitative part of the study will be on the aggregate frame of the interviewees' answers and by the sequence of the research's sub-questions.

8.3.1 Entrepreneur's Attractiveness: Focused Skills

Referring to the first research sub-question, which says "What additional knowledge do entrepreneurs need to learn to be more attractive to investors?", the interviewees mentioned two sets of skills that entrepreneurs are likely to learn to become engaged with investors. First comes the presentation or pitching quality. As Sami Al-Khursani defines it, "gaining the investor's intimacy" is the key. The pitch or the presentation that entrepreneurs deliver is important. However, the current status of the presentations is poor as the venture's idea, value proposition, and the financial information about it are not clear in most of these pitches. The rationale behind such poor status is that entrepreneurs do not know what investors want as they do not have the information that

investors want to see. In addition, the interviewees know that to gain the investor's intimacy, the pitch or the presentation should be sellable, speak the investor's language, contain "What-If" scenarios, and demonstrate evidence that the entrepreneur did hard and serious work toward the venture's idea. As Mason and Harrison (2010) say, the lack of needed experience or knowledge helps the entrepreneurs in the execution of both pre- and post-investment processes (see Table 61).

Table 61: Summary of the interviewees' insights on the entrepreneur's presentation skill

Subject	**Current status**	**Reason(s)**	**Desired focus area(s)**
Gain the investor's intimacy	• Poor / unclear venture idea • Poor / unclear value proposition • Poor / unclear financial data	• Entrepreneurs do not know what investors want. • Entrepreneurs do not have the right information that investors want to see.	Gaining the investor's intimacy needs a pitch that: 1. Sells to the investor. 2. Talks investors' language. 3. Includes a What-If Scenario. 4. Demonstrates hard and serious work.

The second set of skills involves the entrepreneur's mindset, not the generic skills that investors usually do not focus on, but the ones that are likely to exist in the current entrepreneurship education and training programs in the Kingdom. In this part, skills such as problem-solving, closing deals, management, and action-oriented skills are the ones that build the entrepreneur's mindset and are what investors are seeking. This part aligns with Volkmann et al. (2010) regarding the need to build behavior skills that includes these management skills (see Table 62).

Table 62: Summary of the interviewees' insights on the entrepreneur's attractiveness factors

Subject	**Current status**	**Reason(s)**	**Desired focus area(s)**
Attractiveness in entrepreneur	Poor management skills	Investors do not focus on general characteristics and skills that are under focus in current training programs.	The entrepreneur's mindset through teaching by business cases in workshops, with a focus on: 1. Problem-solving skills 2. Closing deals skills 3. Management skills 4. Action-oriented skills

8.3.2 Venture's Attractiveness: Solid Value Proposition

The second sub-question was "What additional knowledge do entrepreneurs need to learn to make their ventures' concepts more attractive to investors?" The feedback of the interviewees stated that available opportunities are poor due to the vague portrayal of the ventures' value propositions. This issue is vital for investors. Usually, they want to find an opportunity that helps in maximizing profit, serves a message to society, or offers innovation in technology. Thus, building a solid value proposition, in general, is essential to make a venture attractive to investors (see Table 63).

Table 63: Summary of the interviewees' insights on the venture's attractiveness factors

Subject	**Current status**	**Reason(s)**	**Desired focus area(s)**
Attractiveness in venture	Poor availability of opportunities for potential investment	Not a clear value proposition.	The opportunity helps to maximize profit, serves a message to society, or offers invention in technology toward the future: Build the value proposition.

8.3.3 Business Plan Attractiveness: Based on Due Diligence

Referring to the third research sub-questions on this point, the question says "What additional knowledge do entrepreneurs need to learn to make their business plans more attractive to investors?" The general understanding of the interviewees' perspective is that predetermined business plans do not work with investors. The reasons, simply, are that such business plans are likely to not function in practice, being theoretical in the information provided and not linked to reality. The desire here is to focus on learning how to build the components of the business plan in partnership with the investors or based on the investor's due diligence governance, by which the business plan appears practical and doable (see Table 64).

Table 64: Summary of the interviewees' insights on the business plan's attractiveness factors

Subject	**Current status**	**Reason(s)**	**Desired focus area(s)**
Attractiveness in business plan	Predetermined packages	Business plans that do not function, are theoretical, and are not linked to reality	Prioritizing its components based on what investors want. Thus: 1. Entrepreneur and investor should work on developing the business plan. 2. Due diligence is the foundation that a business plan should rely on.

Mentioning due diligence and its relationship to the business plan within the conversation with the interviewees leads to the question of why it is important and where it stands within the available training programs in the Kingdom. The fourth research sub-question in this regard was "Do entrepreneurs need to better learn how investors conduct their due diligence to prevent the problem of imperfect information?" According to the feedback of the interviewees, investors' decision-making process relies on the due diligence that they conduct. Unfortunately, entrepreneurs' knowledge in this regard is poor because this subject is not available in current training programs in Saudi Arabia. The language used in determining a transaction value is "specific, complex, and extensive" (Roberts, 2010, p. 1). Thus, including due diligence as a concept in entrepreneurship education and training is more likely to offer entrepreneurs an actual opportunity to learn deeper about the investors' decision-making process and to learn to practice the "What-If" scenario in business. This process helps investors to focus on and to help in building the entrepreneurs' maturity toward being more professional in dealing with investors. Entrepreneurs need to know what investors are expecting them to fully understand, such as the financial model structuring at every stage of financing (Allman, 2015) (see Table 65).

Table 65: Summary of the interviewees' insights on the value of including due diligence in training

Subject	Current status	Reason(s)	Desired focus area(s)
The investor's decision-making process	Entrepreneur knowledge is poor about due diligence.	Not available in current training programs in Saudi Arabia	Investors' Decision Making. 1. Help entrepreneurs know how investors make decisions. 2. Learn the What-If scenarios that investors focus on. 3. Build the entrepreneurs' maturity.

8.4 The Proposed Optimal Training Module

It is important to mention that this work is to identify the training needs for the entrepreneurs to overcome credit rationing. The intention of this researcher is not to develop a full package training program, but this section acts as what is known in literature as Training Needs Analysis (TNA). The TNA mission is to "identify those performance gaps that can be remedied by training" (Shibani, 2017, p. 43). It appears more as working on a "bespoke training solution" (Denby, 2010, p. 148 in Shibani, 2017).

8.4.1 Rationales Behind Having the Optimal Training Module

Approaching the elements of knowledge that may structure the framework of the proposed optimal training module, based on data collection and supported by literature, it is important to first examine the justification for why it is likely to exist. The fifth research sub-question was: "Is the quality of the current entrepreneurship education and training programs in Saudi Arabia acceptable for preparing entrepreneurs to connect with investors to obtain financing to establish their ventures?" All interviewees agreed that the current entrepreneurship education and training programs in Saudi Arabia do not produce what they are seeking as investors. The current programs suffer poor or old conventional topics in mostly a conventional classroom delivery method.

Additionally, the trainers' competencies are questionable. The reasons behind that is that such institutes likely seek quick wins with entrepreneurs (as students) despite the actual needs of investors. Also, most of the trainers are lacking in practical business background. Such institutes may not communicate with investment institutes to assess the situation, and for their requirements in entrepreneurs for these educational and

training agencies to align and evolve. This trend connects with Johannisson's emphasis (1992) that "formal training is inappropriate" (p. 5), suggesting that entrepreneurship training should be integrated with what he calls "the everyday business operations" (p. 5).

Thus, building the investment maturity in entrepreneurs is missing significant factors leading to rejection for investors' financing. To build such maturity, business language needs to be used, close relationships with subject matter experts in investment and financing is required via workshops, and teaching how to collect data for the venture's value proposition and business plan are mandatory. All these issues do not exist, in general, within the current education and training programs in Saudi Arabia, according to the interviewees (see Table 66).

Table 66: Summary of the interviewees' insights about the current training quality in the Kingdom

Current status	**Rationale(s) behind the current status**	**What is/are missing?**
• Poor topics • Poor delivery methods • Poor trainers' competencies	• Training institutes seek quick wins by providing training that is not important to investors. • Most of the trainers are not business "savvy." • Training institutes are likely to have no collaboration with investors.	Building investment maturity: 1. The business language 2. New delivery methods (Workshops with actual investment experts) 3. Business-savvy trainers (trainers with practical business practices and knowledge on financing vehicles) 4. Teaching data collection and research

Related to the same subject and aligning with the sixth research sub-question, which says "What can investors do to help entrepreneurship education and training institutes better prepare entrepreneurs for engaging with investors on financing?," the insights received from the interviewees were revealing. All interviewees agreed that a module is needed to teach entrepreneurs how to deal with investors. The best quote received was from Magar, who said that we need a module that is an "Investors-Based Business Case" training module. It was intriguing that all the interviewed experts agreed that business schools should build the module in collaboration with professionals from the entrepreneurship and SMEs-financing community. The concerned parties, the

entrepreneurs and investors, would share mutual benefits from the availability of such a training module. For instance, entrepreneurs are likely to learn practical knowledge about investment that may lead to aligning their interests with investors. For investors, based on their involvement in providing the module, they are likely to have an opportunity to explore potential opportunities at early stages and increase the volume of favorable deal flow (see Table 67).

Table 67: Summary of the interviewees' insights on having an optimal training module

Nature of training module	**Moderator / facilitator of the training module**	**Benefit(s) for engaged parties**	**Focus area(s) of knowledge transfer to entrepreneurs**
Investor-Based Business Case Training	• Business schools • Investment professions	**Entrepreneurs:** • Learn practical knowledge about investment. • Align interest of entrepreneurs with investors. **Investors:** • Explore potential opportunities in early stage. • Increase the volume of favorable deal flow.	• Building the investment maturity and discipline • How Investors Make Decisions: assess real examples in workshops with investors • Mentoring and coaching workshops with investors • Teach the roles of investors (due diligence awareness) • Teach how to conduct field studies, seek information, and discuss numbers • Building the team work spirit in entrepreneurs (trust investors and share the information) • Constructing a solid value proposition that investors focus on

8.4.2 Proposed Knowledge Elements of Optimal Training Module

At this point, it is important to mention one important issue based on the study's data findings and literature. The proposed optimal training module is not designed to replace any entrepreneurship education or training programs but to complement them. Most of the programs focus on building the innovative entrepreneurial mindset (Gibb, 2014; Sidhu et al., 2015). This proposal is likely to focus on building the investment entrepreneurial mindset of entrepreneurs and training them on the investors' language as they will

communicate with people from the investment community. It is about preventing information asymmetries that can occur when “different people know different things” (Stiglitz, 2002, p. 469 in Connelly et. al, 2010), or when one party holds information while another party, which is expected to make a decision, does not have this information (Connelly et al., 2010). It is important to align the knowledge of both parties, the entrepreneur and the investor, to prevent or at least reduce the impact of any potential information asymmetries that may occur.

Providing entrepreneurs with focused knowledge is significant because better education and experience lead to higher performance in the execution of both pre- and post-investment processes (Dimov & Shepherd, 2005). Thus, the issue of better educating entrepreneurs is more likely to help them in facing credit rationing, according to authors such as Dimov & Shepherd (2005) and Hoque (2016). Other authors, such as Fairlie (2012), Fayolle (2009), Henry et al. (2004), Kirby (2004), Lima (2012), and Nkirina (2010), agree that a human capital context with a focus on upgrading entrepreneurship education and training is likely to improve the performance of entrepreneurs.

Seven issues are derived from the study’s findings (see Table 9 for summary). They are likely to appear in the build-up of components of the proposed optimal training module. They can be considered as the elements of knowledge needed to raise the standard of protecting entrepreneurs from facing the credit rationing challenge. The seven issues include the following:

1. Researching and data finding and analysis

Downgrading the level of information asymmetry between concerned parties within a specific interest is a vital issue toward success (Connelly et al., 2010). In a financing case, the concerned parties are entrepreneurs and investors. Investors are likely to target productive industries for their investments (Zider, 1998). However, they may not invest in some small ventures due to the “high information costs and risk aversion due to an unproven market-readiness” (Robson et al., 2013).

An entrepreneur needs to be capable of searching and collecting data about what makes the investor satisfied to consider examining the venture case. Before approaching investors, entrepreneurs need to learn such components as identifying opportunities, having the right resources to start a business, calculating and mitigating risks, building a network, using technology in producing products and services, entering new global markets, and raising funds (Acs et al., 2017).

2. Financing model structuring

Developing financial modeling is one of the issues that appeared from the data findings in the study. Poor financial modeling is likely to cause startups and SMEs to be negatively impacted because of credit rationing (Helsen & Chmelar, 2013). Entrepreneurs need to learn in some depth about financial models structuring. Entrepreneurs and SMEs, due to the challenges that prevent collateral lending from being available to them, may consider attempting viability-based financing (Berger & Udell, 2005). They should explore various types of financing vehicles to find better opportunities rather than remaining with what appears to be the only type available. They should also learn about different types of financiers and how they act. For instance, in credit markets, venture capital firms pursue projects with low monitoring and selection costs (Amit et al., 1998, p. 441). Additionally, investors are likely to focus their investments in productive industries (Zider, 1998). Moreover, moving toward IPOs is a significant trend for venture capitalists (Jeng & Wells, 2000).

Thus, learning the financial model structure for entrepreneurs offers the opportunity to investors of a clear and quick chance to examine the venture case and to identify whether the entrepreneur and the venture are high-risk or low-risk borrowers (Stiglitz & Weiss, 1981) with minimum information assessment cost. This process aligns with Robson et al. (2013), who say that “High information costs and risk aversion due to an unproven market-readiness are likely to prevent lenders investing in some new and small firms” (p. 349).

3. Value proposition structuring

During the discussion in the interviews, there was a focus on the concept of the value propositions of ventures. This issue is not easy for many entrepreneurs to clearly identify because, in determining a transaction value, the language used is “specific, complex, and extensive” (Roberts, 2010, p. 1). This finding is backed by Šimić (2015), who identified five main factors and 14 criteria that investors use in assessing a venture opportunity. Three factors are related to the venture’s value proposition in providing technical and business information: product/service, characteristics of the market, and venture’s financial characteristics.

Peter Wirtz (2010) says that the entrepreneur needs to identify the strategic opportunity in a venture to reach “monetary earning potential” (2010, p. 43) with the investor. Wirtz (2010) explains that investors appreciate the knowledge that an entrepreneur has to help identify the strategic opportunity. Entrepreneurs must define the

value proposition of the venture by such factors as innovativeness, patentability, unique selling proposition, and market volume, growth, and acceptance that fit the investor's investment strategy, return on investment, and exit strategy (MacMillan et al. (1985); Mason and Stark (2002); Muzyka et al. (1996); Tyebjee and Bruno (1984) in Marija Šimić, 2015).

4. Quality business plan formulation (based on investor's due diligence)

According to the interviewees, the concept of a quality business plan is a cruel element of information submittal to investors. Evidence in the literature states that many entrepreneurs, especially nascent ones, do little to prepare their business plans with the information that investors seek, especially in the commercial, financial, and legal areas (Zwilling, 2015).

According to Zwilling (2015), first-time entrepreneurs are more likely to not be familiar with the due diligence process in which investors engage. Consequently, they are likely to be unaware of what makes a business plan attractive from an investor's perspective. Due diligence simply is a "fact-finding mission" (GE Capital, 2012, p. 3), which Zwilling (2015) says is "mysterious and dreaded." According to Lehman Brown (2014), it is a set of tasks to "offer a background and framework for evaluation of any target firm's future yield and for ascertaining whether or not a sufficient potential for sustainable development exists" (p. 3).

5. Building relationships with investors (discipline and trust)

Building a professional relationship with investors that is based on discipline and trust appeared in the study's findings. This result is supported from literature that such a relationship helps the entrepreneur to respond to what investors have in mind (Business Insider, 2010), to build trust (K. W. Thomas, 2010), and to offer the opportunity for both parties to know, understand, and appreciate each other. Also, Davidsson and Honig (2003) found that nascent entrepreneurs are more likely to succeed if they have strong communication skills in the form of connections and joining a business network, then advancing gradually through the start-up process.

The communication between an entrepreneur and an investor is about building a covenant. According to Business Insider (2010), in the business world "the implicit covenant that exists between entrepreneur and investor" is likely the most significant subject not yet being fully understood. Thus, due to the significance of the relationship between an entrepreneur and an investor while working on a deal, Bhoyar and Nagendra

(2014), in alignment with Hoque et al. (2016), discuss what entrepreneurs should know and do when dealing with investors. Feld and Mendelson (2013, p. 5) advise nascent entrepreneurs on how complex and mysterious the relationship with investors or financiers is during negotiations for closing deals and how to overcome this challenge. From Saudi Arabia, Khalid Sulaimani (2015) explored the importance of having a strong relationship with investors as they have numerous questions to ask.

Building trust is the other issue under this subject. Entrepreneurs' biases are an issue, according to Diamond (1991) and Hoque et al. (2016). Many entrepreneurs question financial suppliers' motivations when they are rejected. Thus, entrepreneurs need to know that investors are more likely not to be biased when dealing with them as they "don't use their intrinsic rewards as a guidance mechanism," but extrinsic rewards as career goals (Thomas, 2010, p. 103). Investors' motives are likely to be understood through determining why and how they communicate and seek specific information from entrepreneurs, leading toward an appreciation of the ultimate goal of a funding decision (Deci & Ryan, 2013). Investors' motivation is most likely about "a certain goal, not a situation" (Jordan, 1952, p. 76). Learning communication skills that include investors' motives, which is the "exploration of the energization and direction of behavior (Deci & Ryan, 2013, p. 1)," could be considered an important issue for nascent entrepreneurs to learn to perform better in building a relationship with investors that may bring mutual benefits.

Thus, the relationship between entrepreneurs and investors is an issue that needs attention to develop a mutually beneficial situation in terms of financing a venture, as such authors as Bhoyar (2014) and Feld and Mendelson (2013) state. Such an evolution in the relationship, according to Kjelland (2008), is likely to bring confidence to entrepreneurs toward building the needed networking with investors.

6. Management skills

According to the findings, management skills, especially those of problem-solving, negotiating and deal closing, and action orientation, were under scrutiny. This result is supported by Aulet of MIT (2013), who says that in addition to the entrepreneurial mindset, the management skillset is mandatory for the success of entrepreneurs. When it comes to the entrepreneur's behavior, Volkmann et al. (2010) find the defining features to lie on how the entrepreneur acts as an individual, which is related to management style. In this regard, the entrepreneur's behavior is completely different from that of the typical administrator, particularly with respect to strategic vision, dealing with resources

in terms of control and commitment, and approach to rewards. For the action orientation, for instance, time is a critical player in dealing with investors. This finding is backed by Allman (2015), who emphasized that entrepreneurs need to know that time is always precious to investors, and they need to understand how different types of investors function.

Although this study is new within the boundary of Saudi Arabia, according to the recent knowledge of the researcher, similar studies have been conducted elsewhere. For instance, in Germany, a study was conducted by Backes-Gellner and Werner (2003) to assess the signals that may lead to making entrepreneurs in Germany to stand in front of credit rationing through preventing information asymmetries. They found evidence that indicated that the human capital development factor in helping entrepreneurs to succeed plays a critical role through teaching quickly the management skills needed. Robson et al.'s research (2013) is another important example in this regard. They found that "quality signal of prior business ownership experience … reduced the propensity of entrepreneurs to report being credit-rationed entrepreneurs," with human capital playing a significant role in helping such entrepreneurs succeed (p. 367–368).

7. Gaining the investor's intimacy

Although the presentation and obtaining the investor's intimacy, as Khursani defines it, was the first issue to be mentioned during the interviews, it is more likely to be the last section of the training module. Research is based on the premise that the adverse impact of credit rationing can be reduced by improving the quality of information presented. An entrepreneur needs to first learn how to provide the right information in the right format toward gaining investors' intimacy when they present their first pitch.

By examining all the elements of knowledge in the optimal training module, with issues such as a poor venture idea or poor value proposition, the financial information may not be presented correctly to the maximum level possible. This finding is backed by Mancusi and Vezzulli (2014), who say that ambiguity that exists due to imperfect information is likely to take the entrepreneur nowhere with investors. The pitch is likely to be sellable, speaks the investor's language, contains the "What-If scenarios, and reveals that the entrepreneurs did hard and serious work toward their venture's idea.

Table 68: Summary of the elements of needed knowledge to build the proposed optimal training module based on the study's data analysis

Proposed element(s) of knowledge that are likely to build the optimal training module based on data collection findings and analysis	**Support from literature**
• Researching and data finding and analysis	Acs et al., 2017 Connelly et al., 2010 Robson et al., 2013 Zider, 1998
• Financing model structuring	Berger & Udell, 2005 Brander & Zott, 1998 Helsen & Chmelar, 2013 Jeng & Wells, 2000 Zider, 1998 Stiglitz & Weiss, 1981
• Value proposition structuring	Harrison & Mason, 2017 MacMillan et al., 1985 Mason & Stark, 2002 Muzyka et al., 1996 Roberts, 2010 Šimić, 2015 Tyebjee & Bruno, 1984 Wirtz, 2010
• Quality business plan formulation (based on investor's due diligence)	Brown, 2014 GE Capital, 2012 Robson et al., 2013 Zwilling, 2015
• Building relationships with investors (discipline and trust)	Bhoyar, 2014 Bhoyar & Nagendra, 2014 Business Insider, 2010 Davidsson & Honig, 2003 Deci & Ryan, 2013 Diamond, 1991 Feld & Mendelson, 2013 Hoque et al., 2016 Jordan, 1952 Kjelland, 2008 Sulaimani, 2015
• Management skills • Problem-solving • Negotiating and closing deals • Action orientation	Allman, 2015 Aulet, 2013 Backes-Gellner & Werner, 2003 Robson et. al, 2013 Thomas, 2010 Volkmann et al., 2010
• Gaining the investor's intimacy	Mancusi & Vezzulli, 2014

8.4.3 Delivering the Optimal Training Module

According to Management Sciences for Health (2012), training is defined as “any planned activity to transfer or modify knowledge, skills, and attitudes through learning experiences” (p. 52.2). However, “Training alone is often not sufficient to change behavior or improve performance,” (p. 52.2) unless there are structural changes in the nature of resources that may support this training occurs and such change is essential (Management Sciences for Health, 2012).

Thus, identifying the components of the proposed optimal training module that may help entrepreneurs to face credit rationing is not enough. Three other related critical issues should be considered. They are: (1) the teaching method and the way of delivering the module, (2) the competencies of the instructors who are expected to deliver the training module, and (3) the most appropriate institute to conduct the training module.

Examining the first issue, the method of teaching entrepreneurship is a field that was not provided enough focus in literature. According to Arasti et al. (2012), “in the field of entrepreneurship education, a few studies have been conducted on the subfield of teaching methods” (p. 6). Sidhu et al. (2015) concur on the subject. Arasti et al. (2012), examining teaching entrepreneurship in Iran, which is in the same regional zone as Saudi Arabia, the MENA region, worked on identifying the best teaching method for a specific subject, creating a business plan. They found that the five teaching methods are: (1) group project, (2) case study, (3) individual project, (4) development of a new venture creation project, and (5) problem-solving. This finding is linked to this study regarding the delivery method of the training module. The interviewees emphasized that the teaching method of the module should be non-conventional by having entrepreneurs form groups in a workshop instead of traditional classes. A study conducted in the United States at the University of Illinois at Chicago, found evidence that business plan formulation through business simulation is a better learning method than conventional classroom lecturing. The new method demonstrated positive results on the performance of entrepreneurship students (Gartner & Vesper, 1994, p. 179). In Norway, entrepreneurship education is offering less attention to classroom education and more to “learning-by-doing.” The authors call it an “action-based entrepreneurship education program” (Rasmussen & Sørheim, 2006, p. 185).

The second concern mentioned during the interviews is that the module should be provided by instructors who have business backgrounds instead of the conventional academic faculty who are likely to be non-competent. This issue is supported in literature by Johannisson (1992), who emphasized the non-suitability of formal training in general.

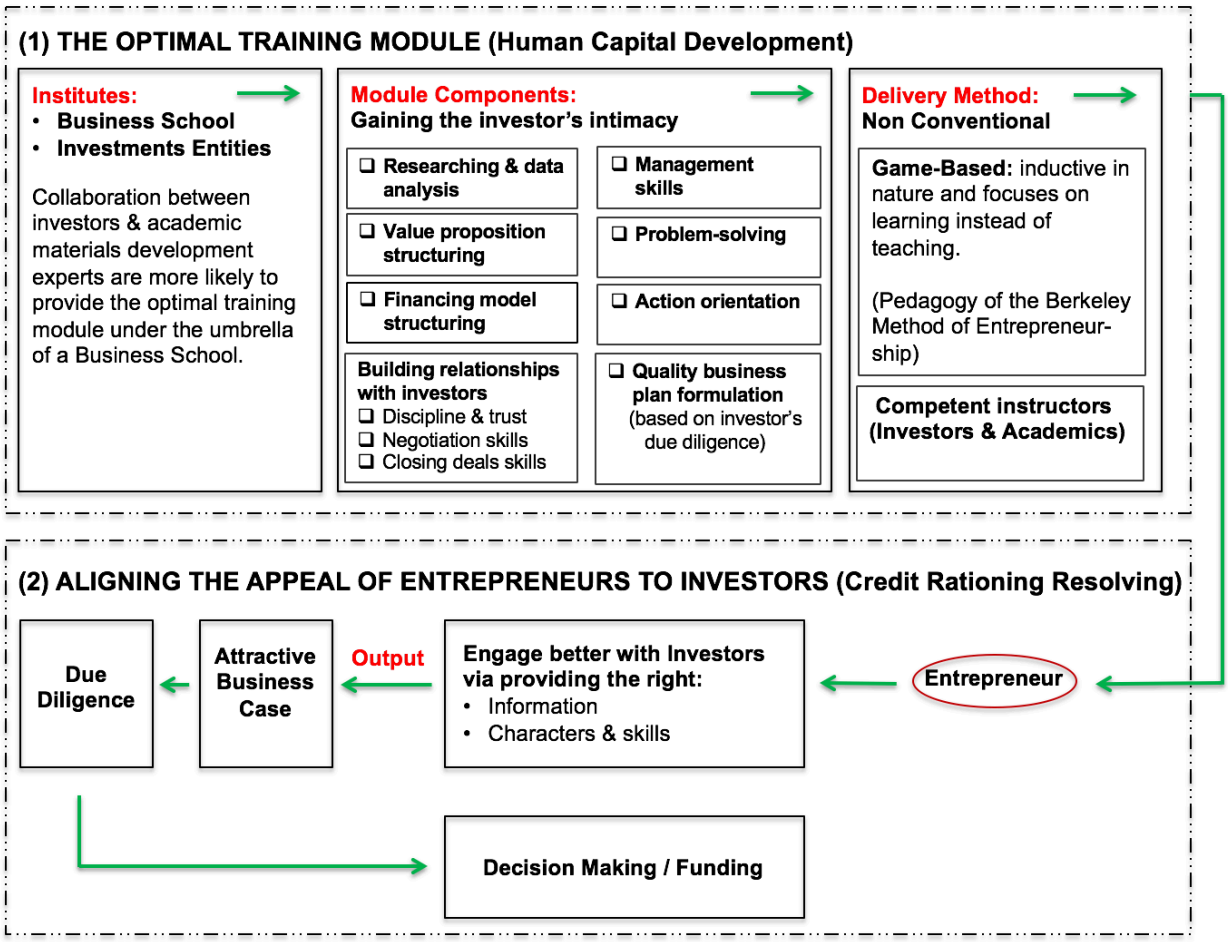
Arasti et al. (2012) state that “Effectiveness of entrepreneurship education is largely related to the teacher’s skills … and knowledge of using different teaching method, specifically the methods of teaching entrepreneurship” (p. 6).

The third issue to consider is the institute. The interviewees mentioned that business schools should provide this optimal training module. This finding aligns with Sidhu et al.’s observation (2015) that “colleges and universities can play an important role,” for example, in working on “engineers [becoming] more entrepreneurial” (p. 51).

We need to be rigorous yet practical regarding the method of delivering the optimal training module. Saudi Arabia is likely to not be well-supplied in subject matter experts in investing who are willing to commit and contribute in lecturing. We observed during the interviews, the second part of this study, that three out of the six interviewees agreed to participate but only partially. This result may indicate that the pool of investor lecturers may not be that broad in Saudi Arabia. To overcome this potential challenge, there remains a wide buffer of acceptable faculty within the universities and business schools, as Sidhu et al. (2015) mentioned. Also, exploring methods of entrepreneurship education learning strategy that aligns with the targeted learning outcome needs to be conducted to select the most suitable and “effective selection of pedagogy” (Gibb & Price, 2014, p. 4). However, Gibb (2014), based on Baume (2009), suggests that it is also possible to select “the most appropriate pedagogy for each outcome and become the foundation of an entrepreneurial learning strategy” (p. 206).

For the proposed optimal training module of this study, there is an opportunity to apply the “Game-Based” method, which is the “Pedagogy of the Berkeley Method of Entrepreneurship” (Sidhu et al., 2015, p. 61). The method is inductive in nature and focuses on learning instead of teaching. The students (the entrepreneurs) are trained on forming a problem’s framework and then finding ways to solve the problem through their venture’s idea or startup. In this way, this student entrepreneur is more likely to “proactively develop [his/her] own understanding rather than to wait for someone to teach them what they need to know” (Sidhu et al., 2015, p. 61). Figure 32 exhibits a sketch of what the optimal training program will look like, which more likely to lead to align the appeal of entrepreneurs with investors.

Figure 32: The proposed optimal training program to align entrepreneurs with investors



8.5 The Value of the Study by the Interviewees' Perspectives

The opportunity to gain the feedback of the interviewees regarding the value of the study and the proposed optimal training module may help entrepreneurs to better engage with investors toward increasing their chance of obtaining financing for their ventures. The summary of their feedback (see Table 10) revealed five areas that may be affected positively.

The first area is the Saudi economy. The proposed training module, the enhancement that is likely to occur in entrepreneurship education and training, may increase the number of funded ventures and build professional and serial entrepreneurs over a short period of time. Such an increase in supported entrepreneurs would be reflected in building more SMEs, which would contribute tangibly to the private sector, and as a result, help in diversifying the economy and creating jobs in Saudi Arabia. This result aligns with the kingdom's Vision 2030 to increase the SMEs contribution from its current 20% to 35% by the year 2030.

The second area that this study may impact is the regulators in Saudi Arabia. Gary S. Becker (1993) states that studying entrepreneurship and related factors that are likely to contribute to making successful entrepreneurs has been a topic of interest for researchers for decades. It can be inferred that the underlying motivation for these studies is to correctly guide governmental as well as non-governmental efforts and investments into areas that will yield the best possible results. The Ministry of Commerce and Investment, which is working on re-evaluating the status of poor entrepreneurship and SMEs development financing performance, according to the feedback of two interviewees, may benefit from the study and having this training module to potentially improve the performance of financing entrepreneurs and SMEs. Also, this proposed module may evolve to be "a potential assessment tool for regulators to evaluate progress and tangible results in entrepreneurship training programs," according to Magar, one of the interviewees.

The third area is the entrepreneurs' community. Entrepreneurs are likely to gain a different quality of knowledge as well as skills. This result may attract investment with higher chances, as Hoque et al. (2016) say that young entrepreneurs and SMEs may have more opportunity "to build up a good relationship with fund suppliers" (p. 6). Simply, the benefit here is that entrepreneurs will learn what investors rely on in making their investment decisions. Also, entrepreneurs are likely to engage in investors' networks toward building trust with them.

The fourth area that may be affected positively is the investors' community, as having quality entrepreneurs with the right knowledge that aligns them with investors is likely to increase the potential deal flow for them in more efficient time. When investors are involved in training, it may build true relationships with entrepreneurs who have potential ventures from the start of the training module. Also, investors and entrepreneurs may work together on building matured and solid value propositions. Furthermore, for investors, such a relationship is likely to ease and reduce entrepreneurs' resistance during negotiations and to build market value in the future. This result aligns with the perspective of Harrison and Mason (2017), who mentioned that determining the venture's valuation is the joint responsibility of the entrepreneur and the investor.

The fifth area is the Entrepreneurship Education and Training Institutes, mainly universities and business schools. Kelley and Thomas (2011) observe that many countries worldwide suffer entrepreneurship training deficiencies, which supports transformation in what they offer and how they are structured (Kirby, 2004). Many studies, such as Fairlie et al. (2012), Fayolle (2009), Henry et al. (2005), Lima (2012), and Nkirina

(2010), support working against such deficiencies by suggesting first to reevaluate the effectiveness of available entrepreneurship education and training programs. It is not only knowledge, but also the quality of trainers, as a lack of qualified faculty exists and contributes to such deficiencies, as stated by Fayolle (2009), Arasti et al. (2012), and Sidhu et al. (2015).

The feedback of the interviews mentioned that business schools should lead in establishing and providing the optimal training module, and that the current deficiencies in current available training programs are related to non-professional academic institutes. Business schools can and may lead quality training and build lifelong knowledge. Business schools also can be a useful resource for investors seeking entrepreneurs from universities' students who are more likely to develop innovative venture ideas. As a result, it may lead to creating ventures with social and economic impact, as current entrepreneurship education is struggling to demonstrate a suitable impact on developing countries' economies (Nkirina, 2010). Based on evidence from both the interviews and literature, the most effective method of delivering the module is a non-conventional approach, as mentioned previously, in such studies as at the University of Illinois at Chicago (W. B. Gartner & Vesper, 1994, p. 179), in Norway (Rasmussen & Sørheim, 2006, p. 185), in Iran (Arasti et al., 2012), and at the University of California Barkley (Sidhu et al., 2015).

Table 69: Summary of the interviewees' perspectives on the value of the study for stakeholders

Value to	**Reason(s)**	**Benefit(s)**
Saudi Arabian economy	• Increase the number of funded ventures and build professional and serial entrepreneurs over a short period of time. • Increase the number of potential funding, building more SMEs, which will contribute tangibly to the private sector, and as a result, help in diversifying the economy and creating jobs in Saudi Arabia.	• Diversify the economy and create jobs in Saudi Arabia. • Meet the Vision 2030 target of increasing the SMEs contribution to the Saudi GDP from its current 20% to 35% by the year 2030.
Regulators	• The Saudi Ministry of Commerce and Investment, which is working on re-evaluating the issue of poor	• The optimal training module may evolve to become "a potential assessment tool for regulators to evaluate progress and tangible

	entrepreneurship and SMEs development performance.	results in entrepreneurship training programs.”
Entrepreneurs	• Gain different quality of knowledge as well as skills. • Attract investment.	• What investors rely on in making their investment decision. • Engage in investors’ networks. • Learn to build trust with investors.
Investors	• Increase the potential deal flow for them in more efficient time.	• “It reflects the true relationship between the two parties from the start of the relation, which is based on building value compared with what is happening now.” • “The value proposition is built on steps, which is more matured and solid for both parties as trust needs time to build.” • Such engagement is likely to “ease and maximize the results for investors as we work on reducing the resistance of entrepreneurs during negotiations.”
Entrepreneurship Education and Training Institutes	Business schools should have it.	• Lead quality training. • Build a lifelong knowledge. • Reduce failure rate (safe failure landing). • Focus on universities’ students (innovative entrepreneurs).

8.5 Summary

This chapter presents in its first section, after the chapter’s introductory section, the discussion of the study based on the output of the questionnaire. Five aspects of significance are identified and related to information asymmetry. With the additional two outputs about the quality of current entrepreneurship education and training in the Kingdom, it is more reasonable to argue that a case does exist and needs attention. In the second section of this chapter, the qualitative interviews’ valuable insights are explored. Interviewees offered input on what entrepreneurs should learn and what the proposed entrepreneurship training module should provide to raise the standard of potential success in engaging with investors.

In the third section and based on the study's findings and with the supporting literature, the proposed optimal training program is presented in a holistic format. Seven main elements of knowledge appear to build the subject optimal training module. This comes after presenting the rationales for the module. Next, related issues are examined that are critical and integrate with the delivery of the optimal training module. These issues are the teaching method and the way of delivering the module, the competencies of the instructors who are expected to provide the training module, and the most appropriate institute to conduct the module.

Before this summary, which is the last section, this chapter ends with the value of the study, in its proposal for an optimal training module, and its impact on several areas, such as the Saudi Arabian economy, the regulators, the entrepreneurs, the investors, and the entrepreneurship education and training institutes.

CHAPTER NINE: CONCLUSION AND RECOMMENDATIONS

9.1 Introduction

This chapter summarizes the research aims and key findings. Also, it presents, in connection with some evidence from literature, the implications and possible recommendations for promoting the argumentation of the need for an optimal training module to better engage entrepreneurs with investors in Saudi Arabia. Other issues are included in this chapter, such as the study's limitations and the contribution of this study to literature. This chapter ends by providing suggestions for further research in the area of this study.

9.2 Background of the Study

As background for the study, the unavailability of funds to entrepreneurs and SMEs, even when capital exists, results from a mechanism known as credit rationing. A key driver of credit rationing is information asymmetries. These asymmetries occur when lenders and investors have imperfect information about the risks represented by a given borrower and, in the case of entrepreneurs, their project (Helsen & Chmelar, 2013).

Examining the problem in Saudi Arabia, according to recent official numbers, only 2% of available funding reaches Saudi entrepreneurs and SMEs (Alriyadh Newspaper, 2016). Although the credit rationing exists globally, as Robson et al. (2013) state, there is a pressing need to resolve this issue in Saudi Arabia due to the Kingdom's recent transformation strategy. This new strategic plan includes dealing with two critical economic challenges. First, the plan recommends diversifying the nation's economy and halting its reliance on a single source of income, namely oil revenue. Second, it urges creating jobs for young Saudis and women, who are underutilized and underemployed. Saudi Arabia needs to "create as many as six million jobs by 2030, enough to employ the sizable cohort of young Saudi men and women entering the labor force over the next 15 years" (Al-Kibsi et al., 2015). The Saudi government is relying on the private sector to make a better contribution to the Kingdom's economy, especially in diversifying the economy and creating jobs. Considering the subsector consisting of entrepreneurship and SMEs, the plan places a target of increasing its contribution to the GDP from 20% (based on most recently available data) to 35% by 2030 (Vision 2030, 2016b).

This study is based on the premise that the adverse impact of credit rationing can be reduced by improving the quality of information. Thus, a significant improvement in identified Problem A (Saudi entrepreneurs' lack of access to financing) can potentially be achieved by addressing identified Problem B (Saudi entrepreneurs' limited or inadequate education and training). Under the umbrella of the human capital theory (Cassar, 2006; Davidsson & Honig, 2003; Schultz, 1961; Ziadat, 2015; Unger, 2001), investing in quality entrepreneurship education and preparation for Saudi entrepreneurs, we can establish a skills base that is likely to drive better performance toward achieving adequate return on investment to ensure the continued flow of capital into the subsector.

Thus, the thesis hypothesizes that entrepreneurs need an optimal training module, not in the practical aspects of initiating and running an enterprise, but in understanding the specific types of information that investors utilize in reaching their investment decisions and the type of "signals" from entrepreneurs that inspire confidence on the part of investors. In addition to credit rationing and human capital theory, the present study employs essential concepts from signaling theory, best known from Spence's (1973) work on signaling in the context of the job market. This theory suggests, in the context of this study, that the challenge of imperfect information can be largely overcome by training entrepreneurs to send more accurate and more targeted signals to investors regarding their character, skills, and the viability of their projects—thus leading to more effective and durable business relationships.

Despite the existence of financing and entrepreneurship education and training institutes in Saudi Arabia (see Chapter 3), many authorities and observers agree that these two core elements remain significant challenges in the development of the entrepreneurship and SMEs ecosystem in Saudi Arabia (Abalkhail, 2009; Abousaber, 2013; Albakr, 2016; Alfaadhel, 2010; Al-Hajjar and Presley, 1992; Almahdi and Dickson, 2010; Alsheikh, 2011; Booz&Co., 2008; Boston Consulting Group, 2011; Global Entrepreneurship Monitoring, 2016; Kayed and Hassan, 2013; Khan, 2013; Loony, 2004; Minkus-McKenna, 2009; Porter, 2008, 2009, 2010; Sadi, 2010; Sulaimani, 2015; Tarkiz, 2012). Entrepreneurs in Saudi Arabia need the right education and training to "foster conditions for new ventures and the strategic expansion of regional SMEs" (Rasmussen & Sørheim, 2006, p. 187).

9.2 Aims and Key Findings of the Study

This study aims to propose that investing in human capital development, by preparing entrepreneurs to better deal with investors, is likely to help in resolving the credit rationing challenge that entrepreneurs face when seeking financing. Consequently, the study's central research question is "Why is there a need for an optimal training module to better engage entrepreneurs with investors who are considering financing their ventures?" Six sub-questions were formed to take the research gradually toward reaching an answer. These sub-questions are to examine specific areas related to the concerns connected to the central question, which are based on literature review and actual status in Saudi Arabia. These areas are: (1) what additional knowledge do entrepreneurs need to learn to be more attractive to investors in themselves, in their ventures, and in their submitted business plans; (2) what is the impact of entrepreneurs learning about the investors' due diligence in order to prevent information asymmetry, as entrepreneurs need to understand the decision-making factors on which investors rely; (3) the current quality of entrepreneurship education and training in Saudi Arabia; and (4) the willingness of investors to help in transferring business knowledge to the entrepreneurs through a dedicated training module, if there is a need for this proposed training module.

Regarding the research methodology (for details, see Chapter 5), the relevant study nature is identified as "a two-phase mixed method," as defined by Creswell et al. (2007, p. 71), using both quantitative and qualitative methods in data collection. For the first part of the research, a questionnaire was prepared to use to collect data from three groups of respondents—entrepreneurs, trainers, and investors—to gain deeper understanding (Gay & Airasian, 2003). The research was conducted within the three major cities of Riyadh, Jeddah, and Dammam in Saudi Arabia, where most of the entrepreneurial activities and SMEs development are located. Then, the initial quantitative data results were presented to a set of professional individuals in the SMEs investment and funding industry to elaborate on them, which is the qualitative part of the study. This part of the study is the heavy one, as it is important to go beyond explaining a concept to develop a theory that may explain the "why" of the studied phenomenon, according to Gartner and Biley (2002). Such a design suits the research as it "needs qualitative data to explain significant (or nonsignificant) results, outlier results, or surprising results" (Morse, 1991 in Creswell et al., 2007, p. 72).

As illustrated previously (see Chapter 1), this research aims to achieve five specific objectives, which are based on perspectives from the literature that reflect the situation

of entrepreneurship and SMEs development ecosystem in Saudi Arabia regarding access to finance and quality training. The five objectives focus on reaching two main outputs. The first is to justify that there is a need for an optimal training program that may help entrepreneurs gain better engagement with investors toward financing. The second is to identify the components of the proposed optimal training module regarding the attractiveness of entrepreneurs, ventures, and business plan formulations to investors. The third is to identify the significance of including the due diligence concept in the proposed optimal training module. The fourth is to present a suggestion about the structure of the proposed optimal training module and who is more suitable to provide it in Saudi Arabia. The fifth is to identify the need for investment and entrepreneurship education and training institutes to collaborate in keeping the educational materials and methods of delivery updated based on the SMEs investment market's demand. The following is a summary of the findings:

1. Using the "Fisher Exact Test," which was first suggested to be used for a small sample size in the 1930s by Fisher, Irwin, and Yates (Freeman & Campbell, 2007), the results of the questionnaire were:
    a) The demographic variables were tested. No evidence appeared for any interaction effect in the test for responders vs. questions. Thus, the researcher did not see any demographic variable (nationality, education, and gender) having any significant interaction effect that would change the direction of effect.
    b) No evidence appeared that might lead to identifying what entrepreneurs need to learn, to strength their characters and skills, to become more attractive to investors.
    c) Two significant pieces of evidence appeared regarding the attractiveness of the venture to investors. They are: the timing of the idea as the first aspect that an investor considers, and the size of a funding ticket of a venture that attracts the investor in the Kingdom.
    d) Three significant pieces of evidence appeared regarding the attractiveness of the business plan to investors. They are: how can the venture's clarity be viewed by the investor in the business plan, the importance of a proven business model with a minimum of a one-year track record in the business plan, and whether entrepreneurs generally know what "due diligence" investor conduct means.
    e) The five pieces of evidence that appeared to be significant are highly relevant to information asymmetry, which is more likely linked to the investor's decision-making process.

2. Presenting the quantitative results to the interviewees, who are subject matter experts in SMEs financing, to elaborate on the results and to provide more profound insights into the study. The qualitative results led to the following:
    a) Interviewees agreed that the few pieces of evidence that appeared from the quantitative results are examples of the problem of entrepreneurs' awareness of what investors are seeking in terms of information.
    b) Their elaboration regarding the attractiveness of entrepreneurs to investors focuses on specific skills. First is presentation quality, through which an entrepreneur is more likely to succeed in gaining the investor's intimacy. Second is a set of specific skills that current educational and training programs do not focus on. These skills are problem-solving, deal closing, management, and action-oriented skills.
    c) Their elaboration regarding the attractiveness of a venture to investors emphasizes that entrepreneurs should focus on having a solid value proposition to their venture.
    d) Their elaboration regarding the attractiveness of a business plan to investors focuses on a quality business plan that is based on the due diligence that investors conduct to reach a decision.
    e) Their elaboration regarding the quality of the available entrepreneurship education and training programs is that they are poor, in general, and do not provide the knowledge that entrepreneurs need when facing investors.

3. The research output led to framing the knowledge components of a high-level optimal training module that may contribute to educating entrepreneurs in dealing with investors toward financing. The module appears to contain the following knowledge subjects:
    a) Researching and data finding and analysis, a subject with support evidence in the literature by writers such as Acs et al. (2017), Connelly et al. (2010), Robson et al. (2013), and Zider (1998).
    b) Financing model structuring, a subject with support evidence in the literature by writers such as Berger & Udell (2005), Brander & Zott (1998), Helsen & Chmelar (2013), Jeng & Wells (2000), Zider (1998), and Stiglitz & Weiss (1981).
    c) Value proposition structuring, a subject with support evidence in the literature by writers such as Harrison & Mason (2017), MacMillan et al. (1985), Mason & Stark

(2002), Muzyka et al. (1996), Roberts (2010), Šimić (2015), Tyebjee & Bruno (1984), and Wirtz (2010).

d) Quality business plan formulation (based on investor's due diligence), a subject with support evidence in the literature by writers such as Brown (2014), GE Capital (2012), Robson et al. (2013), and Zwilling (2015).

e) Building relationships with investors (discipline and trust), a subject with support evidence in the literature by writers such as Bhoyar (2014), Bhoyar & Nagendra (2014), Business Insider (2010), Davidsson & Honig (2003), Deci & Ryan (2013), Diamond (1991), Feld & Mendelson (2013), Hoque et al. (2016), Jordan (1952), Kjelland (2008), and Sulaimani (2015).

f) Management skills, a subject with support evidence in the literature by writers such as Allman (2015), Aulet (2013), Backes-Gellner & Werner (2003), Robson et al. (2013), Thomas (2010), and Volkmann et al. (2010).

g) Gaining the investor's intimacy, a subject with support evidence in the literature by writers such as Mancusi & Vezzulli (2014).

4. The interviewees also elaborated on other issues that are related to the training, which are supported in the literature (see Chapter 8 for details). These issues are:

   a) The teaching method and the way of delivering the advanced training module. The interviewees stressed that the teaching method of the proposed module should be non-conventional by having entrepreneurs form groups in a workshop instead of attending traditional classes. Although the method of teaching entrepreneurship did not take an enough space of researching, there is evidence that supports this direction, such as the cases of the "game-based" program at the University of California Berkeley (Sidhu et al., 2015), in Iran (Arasti et al., 2012), at the University of Illinois at Chicago (Gartner & Vesper, 1994), and of the "action-based entrepreneurship education program" in Norway (Rasmussen & Sørheim, 2006, p. 185).

   b) The competencies of instructors who are expected to deliver the training module. The interviewees emphasized that investors, who have a business background, should deliver or participate in delivering the advanced training module. It is a vital issue, as the "Effectiveness of entrepreneurship education is mostly related to the teacher' skills" (Arasti et al., 2012, p.6).

   c) The most appropriate type of institutes to conduct the training module are business schools. According to the interviewees, there is a need to focus on

university students who are more innovative. This direction is supported by Sidhu et al. (2015), who explored what is occurring at the University of California Berkeley in the United States, where the focus is on engineering students.

As a result, the findings state that, based on a review of the literature, original survey quantitative data, and qualitative interviews data, identified components of knowledge, in a format of the optimal training module, can be an important key to overcoming credit rationing. Entrepreneurs who are armed with an in-depth understanding of the due diligence process employed by investors are more likely to invest adequately in their human capital by assembling skill sets and learning to signal the characteristics that investors appreciate while tailoring their ventures and business plans to meet investors' ideals.

9.3 Implications and Recommendations

This study is likely to have some implications in several areas—not only due to the credit rationing challenges that entrepreneurs and startups face but also due to the Kingdom's strategic transformation plan Vision 2030. In this section, the implications are likely to appear based on the study's findings, yet in a tight connection with literature. Also, several recommendations are to be presented in the same format.

9.3.1 For the Entrepreneurs

Marie Löwegren (2006) says that the entrepreneur should work on gaining the "ability to create a linkage from vision to action" (p. 2). It is likely to be reflected in entrepreneurs' efforts to work on building the linkage with investors from the beginning until the day of the decision that the investors make to invest in their ventures. Non-asymmetric information, accompanied by the required management skills, are more likely to make it happen, based on the study output. Potential entrepreneurs armed with the right knowledge will have greater chances with investors, especially when it comes with a focus on learning and practicing to share and provide sufficient information to potential investors to validate their ventures' ideas.

9.3.2 For the Investors

Feld and Mendelson (2013) say, "The entrepreneur is the center of the entrepreneurial universe. Without entrepreneurs, there will be no term sheet" (p. 5). Based on the

knowledge build-up during the interviews in this study, the poor deal flow of ventures could force several investment institutes in Saudi Arabia to shift their business to either other SMEs markets abroad or to other areas such as real estate, as stated by three interviewees. Thus, to overcome this challenge, there is a recommendation for the private sector to become engaged with education and training institutes to provide “advice and forming partnerships to help develop curricula and work experience schemes” (Gallagher, Cooper, Collins, & Shahir, 2015, p. 5).

Such collaboration and support between investors and the entrepreneurship education and training institutes are likely to provide SMEs investors several benefits, which are derived from the interviews in this study. First, investors are likely to feel more confident that entrepreneurs are more practically enlightened. This may help in increasing the deal flow of qualified entrepreneurs with quality ventures, ideas, and information for potential investment. Second, when investors become engaged in lecturing and mentoring in the entrepreneurship training institutes, they have the opportunity for hunting opportunities at an early stage. Third, sharing knowledge with training institutes that can be reflected in entrepreneurship education and training programs provides the opportunity to investors to deliver their intentions or strategic direction in an investment where training institutes can craft entrepreneurs based on investors’ needs.

9.3.3 For Entrepreneurship Education and Training Institutes

Entrepreneurship education is struggling to demonstrate a suitable impact on developing countries’ economies, as it is poorly inserted into their training systems (Nkirina, 2010, p. 153). Kelley and Thomas (2011, p. 90) say that many countries worldwide suffer entrepreneurship training deficiencies. These programs require a transformation in what they offer and how they are structured (Kirby, 2004). Many studies, such as Henry et al. (2005), Nkirina (2010), Fayolle (2009), Lima (2012), and Fairlie et al. (2012), support efforts to reevaluate the effectiveness of available entrepreneurship education and training programs. Johannisson (1992), for example, has long asserted that “formal training is inappropriate” to this task, and he suggests that entrepreneurship training should be integrated with “everyday business operations” to provide an experience that is close to actual cases.

Considering the case of Saudi Arabia, in the field and according to assessment studies that were conducted by well-known management consultants (see Chapter 3 for details), Saudi entrepreneurs lack appropriate training, mentoring, and/or coaching. According to Boston Consulting Group (2011), the entrepreneurial training programs in the Kingdom

are expensive, too generic, and of disparate quality; as the authors explain, “training and advisory services need standardization and harmonization in order to improve accessibility and relevance to entrepreneurs” (Boston Consulting Group, 2011, p. 19). Similarly, United Consulting Group (2015) reported there is a “lack in human capital development” (United Consulting Group, 2015, p. 6), and the Korean Development Institute study states that training needs to include customized modules to fill current gaps, such as in management and financing (Suh et al., 2012, p. 8). Gallagher et al. (2015) recommend that education and training institutes, in GCC countries including Saudi Arabia, are to teach quality knowledge in “new approaches and techniques [of] teaching” (p. 5).

The educational institutes in Saudi Arabia need to start understanding that entrepreneurship is a pressing issue for the Kingdom to diversify its economy and create jobs for the increasing number of young Saudis who are entering the workforce. Thus, entrepreneurship education is a subject that they should take seriously. These educational institutes, such as universities and colleges, should “adopt 21st-century methods and tools to develop the appropriate learning environment for encouraging creativity, innovation and the ability to ‘think out of the box’ to solve problems” (Volkmann et al., 2009, p. 15). The transformation demands a rethinking of educational systems, including the competencies of educators and trainers in all fields, including entrepreneurial education (Volkmann et al., 2009).

However, the verdicts of the interviewees reflect that they are not satisfied with the current performance of the available entrepreneurship education and training institutes in the Kingdom. Thus, they observe that universities, mainly business schools, are likely to be a better choice to lead the transformation in entrepreneurship education and training. The “Investor-Based Business Case,” as one of the interviewees suggests as a title for the proposed optimal training module, could become a new phraseology from this study. A new training module could be developed based on this phrase concept.

Thus, business schools in Saudi Arabia need to consider extending “beyond the walls of the conventional management education pattern” (Bhoyar & Nagendra, 2014, p. 743). Two issues are likely to be pillars for such efforts to evolve entrepreneurship education and training in Saudi Arabia. First, according to Philips and Philips’ definition (2008), education and training programs are developed to achieve specific objectives. These objectives should be measurable regarding research, applications, and practice to provide better training to entrepreneurs. Such enhancement in performance is likely to strengthen the competitive positions of those institutes within the entrepreneurship

education and training business community (Philips & Philips, 2008). Second, for better and higher impact entrepreneurship education and training, it is fundamental that business schools consider collaboration with investors, as such joint efforts are likely to contribute to entrepreneurs' knowledge (Aulet, 2013).

9.3.4 For Entrepreneurship and SMEs Ecosystem Regulators

> The Kingdom of Saudi Arabia is at a significant turning point. From an economic standpoint, the need to drive greater levels of economic diversification has never been more pressing, to underpin both GDP growth and create sustainable jobs and opportunities for the national workforce (Al-Zahrani, 2015).

Depending only on oil, with such unpredictable and fluctuating prices, could cause an economy rescission at any time. Saudi Arabia cannot wait any longer for oil prices to improve. It must move immediately to diversify its economy, especially since about 6 million young Saudis are expected to enter the market by 2030 (Bouyamourn, 2015). A study conducted to help GCC countries to create sustainable economies states that GDP "should be distributed across sectors" (Shediac, Abouchakra, Moujaes, & Najjar, 2008, p. 2). Fostering and developing entrepreneurship and SMEs development in the Kingdom is one of the factors to diversify the economy and create jobs. Industrialized countries value the role of entrepreneurship and small businesses development during an economic recession and high unemployment rates (Garavan & O'Cinneide, 1994, p. 3). For this purpose, one of the recommendations of the Booz & Company's study for the GCC countries, which includes Saudi Arabia, is to "Continuously and consistently … [enhance] human capital, by increasing education levels and importing skilled talent, as needed [also] enhancing financial capital by developing new financing schemes and instruments" (Shediac et al., 2008, p. 15). In short, human capital and financial vehicles are crucial to emphasize, so entrepreneurs may significantly contribute to building the SMEs sub-sector within the private sector of the Saudi Arabian economy. The regulators in Saudi Arabia have a significant responsibility and role to make the ecosystem healthy to help all concerned stakeholders to perform toward achieving the strategic transformation plan outcomes.

9.4 Contribution to Literature

As stated previously (see Chapter 1), the study aims to respond to literature with specific contributions, which are likely to be valuable for future researchers to refer to while reviewing the literature about entrepreneurship and SMEs development in Saudi Arabia.

First, the study adds details and current perspectives on the entrepreneurship and SMEs development ecosystem in Saudi Arabia. For instance, the author noticed, during reviewing several studies (Abalkhail, 2009; Abousaber, 2013; Alfaadhel, 2010; Alsheikh, 2011), that Professor Richard N. Farmer, who was the first to write about the Kingdom's entrepreneurship and SMEs origins in literature back in the 1950s, was not mentioned in any of the studies that examined the subject of entrepreneurship in Saudi Arabia. Farmer's article provides historical evidence that the issue did not emerge recently, but a long time ago and by a private company, which was the Arabian American Oil Company, now known as Saud Aramco. Furthermore, literature in the area of entrepreneurship and SMEs development in the Kingdom is sporadic and limited in scope and coverage (Abousaber, (2013); Alfaadhel, (2010); Aljarallah, (2010); Alshardan, (2016); Ashoor, (2013); Binzomah, (2008); Hertog, (2010). Thus, the researcher organized the literature review chronologically rather than by topic. This approach is more likely to help future researchers to have a clearer picture of the evolution of entrepreneurship and SMEs sub-sector of the Saudi economy. A better understanding of the evolution of the subject would be gained through the three phases that are identified in this study's literature review: the beginnings in the late 1950s, the response to the new growth of entrepreneurial ventures and SMEs around 2004–2005, and the recent discussions of matters related to the survival of this sub-sector after being introduced as a significant issue in the Saudi economy in 2010. With the step change in the Kingdom due to the new strategic transformation plan Vision 2030, this study introduced the subject plan at a glance. This introduction included hints on this plan's potential impacts on different stakeholders within the entrepreneurship and SMEs development ecosystem. Vision 2030 is forecasting the SMEs sub-sector contribution to hit the 35% ceiling in the Saudi economy's GDP by 2030.

Another contribution to the literature that the researcher considers valuable is the list of essential assessment studies that were accomplished by large management consultancy houses such as Boston Consulting Group, Bain & Co, Booz & Co., McKinsey & Co., and several others. Such an introduction is more likely to help future researchers

to have more in-depth and practical knowledge, especially from the business and regulator angles for the topic. Additionally, and in support of providing more non-fragmented information through the study's intention to explore the entrepreneurship and SMEs development ecosystem in the Kingdom, the study presented lists of organizations and programs that support financing and training for the ecosystem.

Second, the study is likely to contribute to the understanding of the link between credit rationing and human capital in Saudi Arabia. This study examines a critical issue that entrepreneurs and SMEs face in the Kingdom. The case is most relevant in countries with similar characteristics and circumstances as Saudi Arabia. Thus, the research model in this study, using the human capital and signaling theories to examine the credit rationing that entrepreneurs and SMEs face, could have a potential value of use for other areas of evaluation and assessment in entrepreneurship education and training. Alternatively, the model could be considered as a foundation to enhance or build upon for the subject purpose in Saudi Arabia and other emerging economies.

Third, the study tried to leverage the insights of entrepreneurs, investors, and subject matter experts in entrepreneurship education and training to clarify how improved information and skills can increase the likelihood of funding for entrepreneurial projects. Fourth, the study formed a foundation for developing a curriculum and delivery method for an optimal training module that is constructed based on the research's results. Finally, the study contributed by exploring the understanding of the importance of collaboration between investors and designers of the entrepreneurship education and training programs. This issue is vital as it helps in examining the subject through potential future researchers toward ensuring that entrepreneurial training succeeds in leading to more successful matches between viable projects and investor funding.

9.5 Limitations

This research explores an important subject that affects entrepreneurship and SMEs development in Saudi Arabia. Although it is not new in literature, to the knowledge of the researcher, the study is likely to be first of its kind to be conducted in Saudi Arabia that examines credit rationing and the potential positive impact of entrepreneurship training in helping to resolve this challenge. Due to its newness, this study has several limitations that should be acknowledged.

First, access to data related to entrepreneurs and SMEs financing is a real challenge in Saudi Arabia as its availability to researchers is not likely to be offered by concerned

parties such as banks and investment institutes. The researcher was unsuccessful in his attempt to obtain some statistical information from several financial institutions on entrepreneurs and SMEs funding cases. It is a common challenge that academic researchers face in the Kingdom. In his doctoral thesis on the financial market in Saudi Arabia, Khalid Alsaeed (2012) noted “the dearth of quality information and the small number of issuances in the Saudi market” (p. 168) that affected his study. The same occurred with Ali Alghamdi (2012) while conducting his study on corporate governance in Saudi Arabia. He mentioned the limits on his study because “corporate governance is modern regulation and is in its early phase” in Saudi Arabia (Alghamdi, 2012, p. 271). These barriers are occurring not only in Saudi Arabia, but in the MENA region in general. Alsharif (2015), while conducting his study in Egypt, states that “databases in most of the industries, especially the VC industry, are not officially available in the MENA region” (p. 105).

Second, the conservativeness of the Saudi society in participating in academic research is an essential factor in limiting the study. The researcher noticed that people in the Kingdom are conservative in providing or presenting information for researching and academic purposes. Studies in Saudi Arabia, especially in new areas, are likely to face a similarly difficult challenge. Abdullah Alqahtani (2013), in his study related to education in Saudi Arabia, mentioned the significance of the cultural aspects in limiting his study, noting its negative impact on the sample size of the study. Based on the communication efforts, the researcher was expecting more investors and training experts to respond to the survey as he communicated with many of them in the Kingdom. Only 21 training experts and 15 investors responded. As a result, managing expectations is vital here for the researcher. This unexpected response volume could impact the concept of generalizing the results, as such a small number of respondents may not represent a generalized perspective of the entire entrepreneurship and SMEs investment or training societies. To overcome this challenge, considering widening the zone of the field study could bring more vibrant and diversified respondents that may lead to valuable results, such as covering more countries within MENA, as this region “has lots of common characteristics” (Alsharif, 2015, p. 241).

Third, another factor, related to the previous factor, that played a role in limiting the study is the qualitative interviews. It was time-consuming to contact subject matter experts in investments and financing and receive their commitment to participate in the study. In the beginning, the researcher received an initial commitment from 15 persons, but only six were fully committed when the time of interviews arrived. The other nine

persons apologized in the last minute, which caused some disturbance to the research. For the qualitative interviews, the plan was to conduct rapport type of discussions with the selected subject matter experts. The conversations were productive and provided valuable insights about the investors and how they view the problem in terms of the entrepreneur, the venture, and the business plan. The interviews also offered insights about the significance of due diligence to be discussed in training and the status of entrepreneurship education and training matter in the Kingdom. Despite the interviewees' rich experience and passion to participate in the study, they used their freedom to talk to bring, in some parts of the interviews, unneeded details or unrelated information to the study. For instance, the interviewees did not focus on the output of the questionnaire in depth. Instead, they focused on their experiences and what they are seeking. Alsaeed (2012), in his study, mentioned that "Discussion might unintentionally divert from the core subject and relevancy" (p. 171). This factor connects with the general practice within the Saudi Arabian culture of listening and offering the freedom of talk to people who are known to be experts in the business. A suggestion here for controlling such a situation is to have more structured questions, especially when assessing a questionnaire result.

9.6 Suggestions for Further Research

With the existence of limitations in this study and literature related to the subject of the research in Saudi Arabia, there is a foundation to build on to conduct further research in the entrepreneurship and SMEs development ecosystem in Saudi Arabia. This subject is strategically significant to the Kingdom as there is a pressing need for this promising sub-sector to emerge, within the private sector of the Saudi economy, with the speed and quality required to achieve the targets of reaching a 35% contribution to the Saudi GDP by 2030, which is based on the Kingdom's strategic transformation vision.

Based on the significance of the field of the study, mainly to Saudi Arabia, with the existence of factors that limited this study to careful consideration by future researchers, the researcher may recommend several potential areas for future research.

9.6.1 Credit Rationing and SMEs Financing in Saudi Arabia

The researcher did not observe a hint, during his journey in the literature review, that credit rationing related to entrepreneurs and startups in Saudi Arabia was previously examined in a study. Thus, credit rationing in the Kingdom appears to be a high potential area of research. For instance, the KAFALAH Program, which is a guaranteed vehicle by

the Ministry of Finance to help local banks lend to entrepreneurs and SMEs toward building their ventures, is an opportunity for assessment. Despite all efforts of guarantees from the government through the Ministry of Finance, the number of beneficiary entrepreneurs remains minimal in the Kingdom. A World Bank report reveals that out of these banks' total funding targeted to SMEs lending, the actual lending amount was only 1.7% (Rocha, Farazi, Khouri, & Pearce, 2010). According to the previous governor of the SMEs Authority, this accumulated percentage accounted for 2% of available funding reaching Saudi entrepreneurs and startups in 2016 (Alriyadh Newspaper, 2016). Eight years after the launch of the KAFALAH Program, only 4,084 cases were funded throughout the Kingdom and mainly in conventional and risk-controlled fields such as services and constructions but not in technology (Saudi Industrial Development Fund, 2014).

The credit rationing subject, about entrepreneurs and SMEs, is still new in the Kingdom and is likely to be a fertile topic for future research, especially with the efforts starting in 2018 to offer researchers more data access. Future researchers should have a better chance to seek the assistance of the Small and Medium-Sized Enterprise Authority (SMEA) in Saudi Arabia to gain access to a broader database of entrepreneurs, trainers, and government agencies that provide financial and non-financial support. Also, the Saudi Capital Market Authority (CMA) can be approached for information and help to access investors in the Kingdom. The researcher can safely say there is a foundation for future researchers to build on this study's results to upgrade the theory by further testing, criticism, or addition.

9.6.2 Human Capital and Entrepreneurship Education and Training

The entrepreneurship education and training in Saudi Arabia is a fundamental issue to help the economy of the Kingdom to achieve its targets of diversifying its economy away from oil and creating quality jobs for the young Saudi citizens. Thus, there is an opportunity for future researchers to work on the human capital development toward enriching the pool of quality deal flow of entrepreneurs and ventures' ideas. For instance, Robson et al. (2012) mentioned a significant issue related to quality "If the goals of policy are to increase the 'quality' of new business start-ups and maximize investment returns, there is a case to target assistance to portfolio entrepreneurs" (p. 603). It is a significant issue to foster the economy in the Kingdom and enrich literature accordingly as it has "received little research attention; this is especially true of the Africa/Middle East region" (Hoskisson, Eden, Lau, & Wright, 2000, p. 264).

In addition to the case in Saudi Arabia, there is potential to implement the study in other countries and regions with similar credit rationing and human capital challenges or circumstances that entrepreneurs and SMEs face. According to Nkirina (2010), entrepreneurship education in the developing countries is struggling to demonstrate the desired impact as it is poorly inserted into the training system.

9.6.3 Using Different Theories to Assess Knowledge Development within Entrepreneurship Education and Training

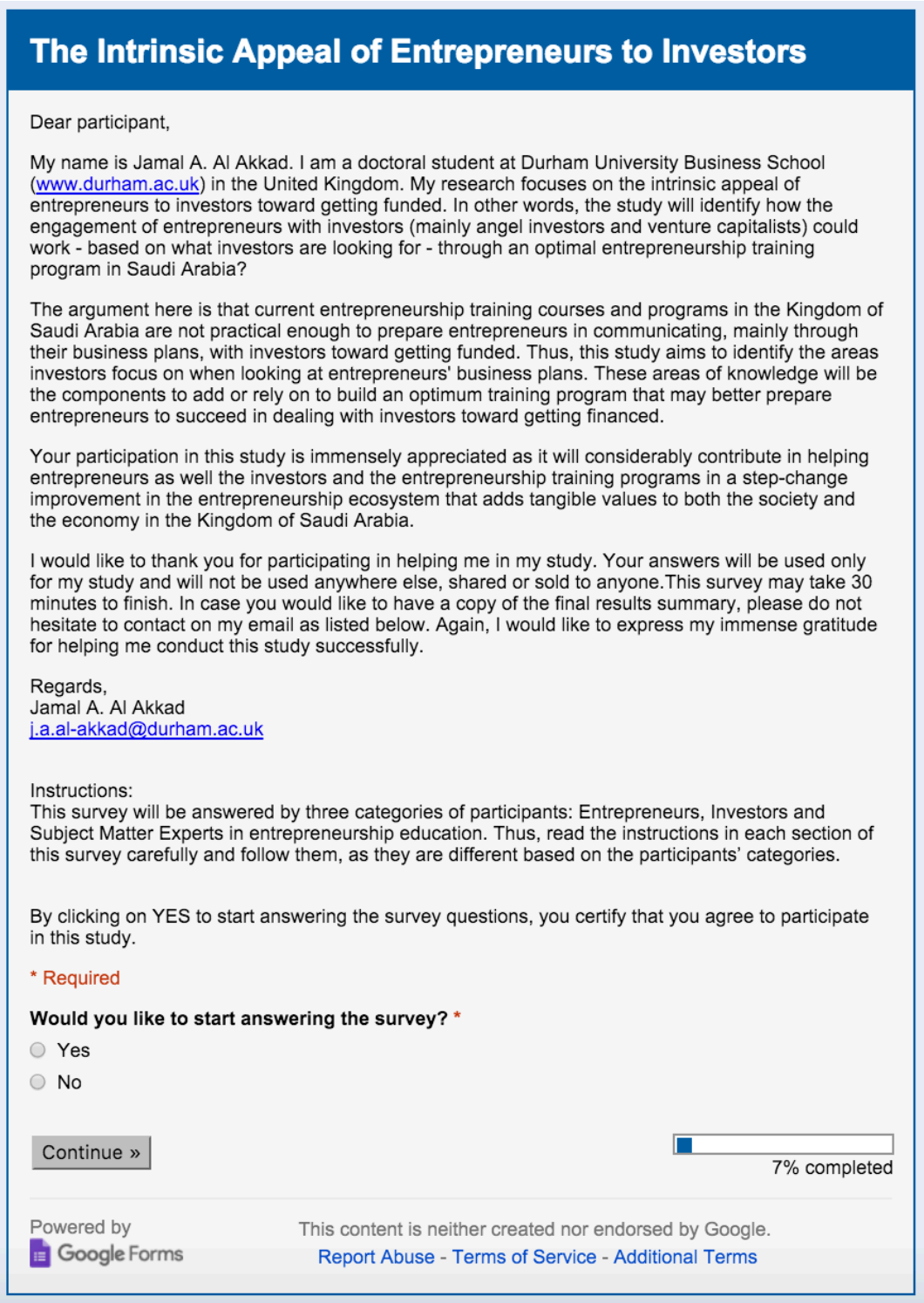
In the entrepreneurship education and training area, developing competent entrepreneurs is not the end of the efforts. Preparing qualified faculty to teach entrepreneurship is another important and pressing issue as revealed in this study. According to Lima (2012), few studies have been conducted in this area. Contributions to literature in this area, not only rigorously but also practically, are likely to ignite the evolution of this field toward having more efficient entrepreneurship education and training programs primarily in Saudi Arabia and countries with emerging economies similar to the Kingdom. Regarding this point in preparing qualified faculty to better train entrepreneurs, for instance, future researchers may assess the issue from different perspectives. In addition to the human capital theory, it could be done by using a different theory, such as the knowledge spillover with its two models. The Marshall (MAR) spillover model, which was introduced by Alfred Marshall in 1890 and supported by the famous scholars Joseph Schumpeter (1942) and Michael Porter (1990), states that employees of different entities within a specific industry may exchange ideas that lead to both new products and new ways of producing them (Glaeser, Kallal, Scheinkman, & Shleifer, 1991). There is a potential area of research on how training experts within their communities, for instance, may strengthen their performance through knowledge spillover to better position themselves toward helping potential entrepreneurs (students or trainees) to have better chances to succeed in their venturing journeys. The Jacobs spillover, which is a second model of the knowledge spillover that was introduced by Jane Jacobs in 1969, states that knowledge spillover does not focus on a specific industry but among various industries. Jacobs believes that the diversity of industries leads to innovation and brings new ways of producing new products (Carlino, 2001). Potential future studies could examine the networking between people from both academic and business communities. Whether using the MAR or the Jacobs model, the field is open to contributions to both the theory and the practice.

9.6.4 The Entrepreneurship and SMEs Development Ecosystem' Stakeholders in Saudi Arabia

The failure of entrepreneurs in obtaining funding most likely means no venture creation, leading to no deal flow to investors and no flow of trainees to entrepreneurship training institutes. This scenario may illustrate the risk of mortality facing the three categories of the population of organizations. Examining the organizations' population supporting entrepreneurship and SMEs development in Saudi Arabia is a potentially fertile area of further research. Issues such as firms' founding, growth, and mortality in addition to changes can be interpreted through the fragments of the organizational ecology theory. For instance, inertia and change, niche width, resource partitioning, density dependence, and age dependence are pillars that can be used in the organizational studies area (Hannan, Pólos, & Carroll, 2007). Therefore, examining "interactions within and between populations of organizations," (p. 18) such as those bodies, could identify potential ways of helping them to communicate better toward complementing their resources and efforts to help and support entrepreneurship and the SMEs development ecosystem. At the same time, they may help themselves to sustain and succeed. There is a potential opportunity to study the interaction of different stakeholders, such as the training and investment institutes, toward building robust, innovative frameworks of producing better entrepreneurs' deal flow and better flow between the education institutes themselves and between the investment and financing institutes.

APPENDICES

APPENDIX 1: The Survey's Cover Page



The Intrinsic Appeal of Entrepreneurs to Investors

Dear participant,

My name is Jamal A. Al Akkad. I am a doctoral student at Durham University Business School (www.durham.ac.uk) in the United Kingdom. My research focuses on the intrinsic appeal of entrepreneurs to investors toward getting funded. In other words, the study will identify how the engagement of entrepreneurs with investors (mainly angel investors and venture capitalists) could work - based on what investors are looking for - through an optimal entrepreneurship training program in Saudi Arabia?

The argument here is that current entrepreneurship training courses and programs in the Kingdom of Saudi Arabia are not practical enough to prepare entrepreneurs in communicating, mainly through their business plans, with investors toward getting funded. Thus, this study aims to identify the areas investors focus on when looking at entrepreneurs' business plans. These areas of knowledge will be the components to add or rely on to build an optimum training program that may better prepare entrepreneurs to succeed in dealing with investors toward getting financed.

Your participation in this study is immensely appreciated as it will considerably contribute in helping entrepreneurs as well the investors and the entrepreneurship training programs in a step-change improvement in the entrepreneurship ecosystem that adds tangible values to both the society and the economy in the Kingdom of Saudi Arabia.

I would like to thank you for participating in helping me in my study. Your answers will be used only for my study and will not be used anywhere else, shared or sold to anyone.This survey may take 30 minutes to finish. In case you would like to have a copy of the final results summary, please do not hesitate to contact on my email as listed below. Again, I would like to express my immense gratitude for helping me conduct this study successfully.

Regards,
Jamal A. Al Akkad
j.a.al-akkad@durham.ac.uk

Instructions:
This survey will be answered by three categories of participants: Entrepreneurs, Investors and Subject Matter Experts in entrepreneurship education. Thus, read the instructions in each section of this survey carefully and follow them, as they are different based on the participants' categories.

By clicking on YES to start answering the survey questions, you certify that you agree to participate in this study.

* Required

Would you like to start answering the survey? *

- Yes
- No

Continue »

7% completed

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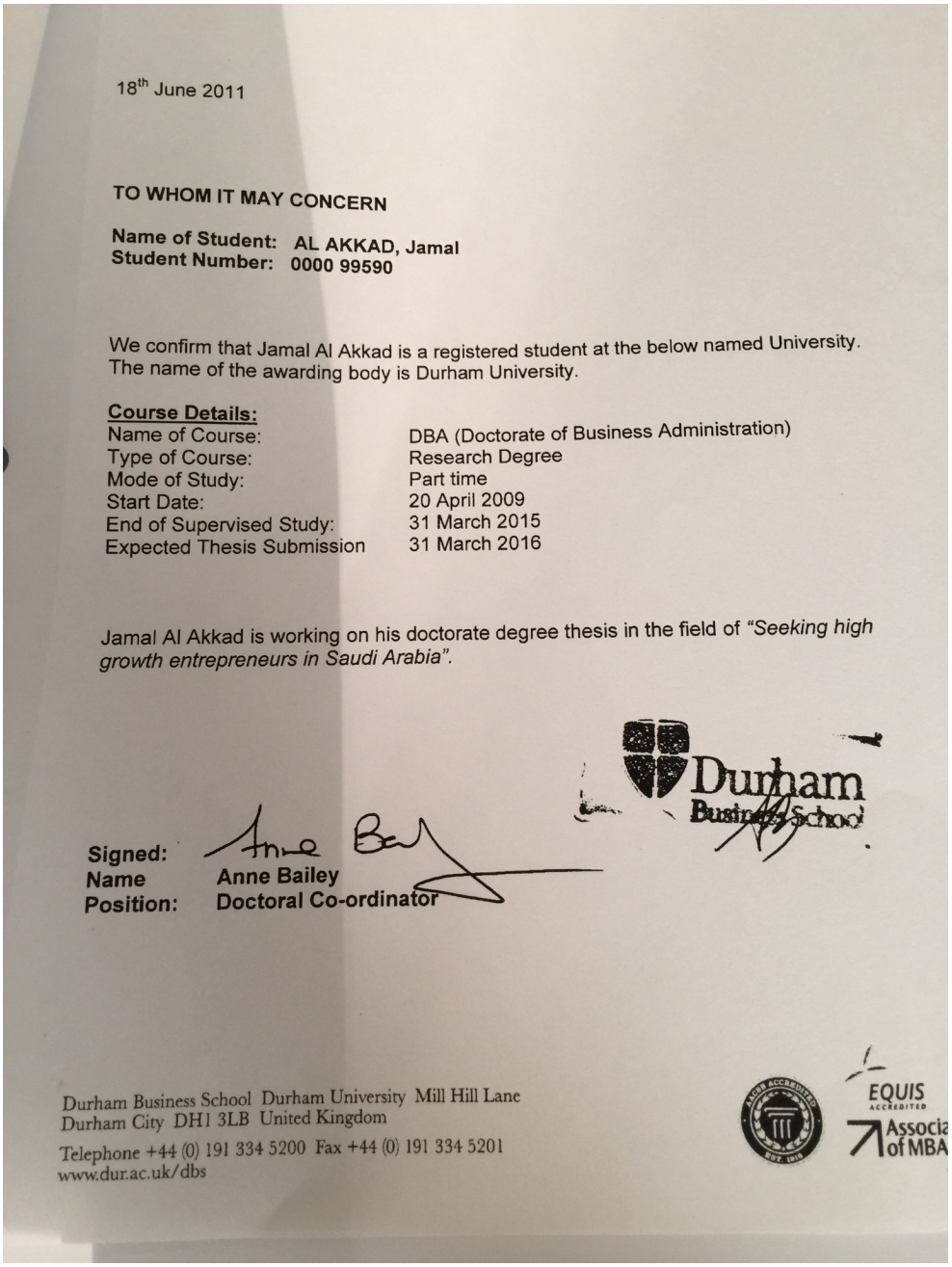
APPENDIX 2: The DUBS Letter



18th June 2011

TO WHOM IT MAY CONCERN

Name of Student: **AL AKKAD, Jamal**
Student Number: **0000 99590**

We confirm that Jamal Al Akkad is a registered student at the below named University. The name of the awarding body is Durham University.

Course Details:

Name of Course:	DBA (Doctorate of Business Administration)
Type of Course:	Research Degree
Mode of Study:	Part time
Start Date:	20 April 2009
End of Supervised Study:	31 March 2015
Expected Thesis Submission	31 March 2016

Jamal Al Akkad is working on his doctorate degree thesis in the field of *"Seeking high growth entrepreneurs in Saudi Arabia".*

Durham Business School

Signed:
Name **Anne Bailey**
Position: **Doctoral Co-ordinator**

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www.dur.ac.uk/dbs

EQUIS ACCREDITED
Associa of MBA

APPENDIX 3: Survey Questions to all Respondents

Questions	Answers	Type of Question
1. I am	a. Male b. Female	Closed-ended Multiple choice
2. My nationality is	a. Saudi b. Non Saudi	Closed-ended Multiple choice
3. My age is	a. Less than 20 b. 20 – 29 c. 30 – 39 d. 40 – 49 e. 50+	Closed-ended Multiple choice
4. My highest educational degree is	a. High School / Community College Diploma b. Bachelor's Degree c. Master's Degree d. Doctorate Degree e. I do not have any diploma or degree	Closed-ended Multiple choice
5. I got my last degree from	a. A Saudi University / College / School b. A non Saudi University / College / School c. I do not have any diploma or degree	Closed-ended Multiple choice
6. My educational background is in in the field of	a. Business (i.e. Finance, Accounting, Human Resources, …etc.) b. Science (i. e. Physics, Chemistry, Medicine, Math & Computing, … etc.) c. Engineering d. Education and Training e. I do not have any diploma or degree f. Other	Closed-ended Multiple choice
7. In what region in the Kingdom your work/your venture is located?	a. Central b. Western c. Eastern d. Northern e. Southern f. I neither work nor my business exists in the Kingdom	Closed-ended Multiple choice
8. I am an	a. Entrepreneur or thinking to be an entrepreneur b. Investor (or work for an investor or an investment company) c. Instructor / Expert in Entrepreneurship Training and Education d. I am not any of the above	Closed-ended Multiple choice

APPENDIX 4: Survey Questions to Entrepreneurs

Questions	Answers	Type of Question
1. As an entrepreneur,	a. I am in business right now, I do not need any financing b. I have an idea only right now c. I already have a ready business plan d. I already have a ready business plan and started seeking funding d. I already have a ready business plan but failed to find funding e. I already have a ready business plan and succeeded in finding funding	Closed-ended Multiple choice
2. My venture idea (existing or my proposed) belongs to the sector of	a. ICT (Information & Communication Technology) b. Energy c. Education d. Healthcare e. Manufacturing f. Supply Chain g. Services h. Chemicals i. Others	Closed-ended Multiple choice
3. I attended at least one training course or joined a program in entrepreneurship	a. Yes, I did b. No, I did not attend any training	Closed-ended Multiple choice
4. The last training program or course I attended was in	a. A Univeristy / College b. An Entrepreneurship Training Institute c. A Freelancer Trainer Session d. I did not attend any physical class training	Closed-ended Multiple choice
5. In the last training program or a course I attended, the instructor was	a. An entrepreneur b. An investor or works for an investment institute c. A professional or a university lecturer in business d. I did not attend any physical class training	Closed-ended Multiple choice
6. The last training course I attended was	a. Free of charge b. I paid to attend (at least one course) c .I did not attend any physical class training	Closed-ended Multiple choice
7. In what education / training institute you attended the entrepreneurship course or program?		Open
8. In general, how do you see the quality of entrepreneurship education and training you attended?	a. Excellent b. There is a buffer for improvement c. Poor, it needs restructuring as entrepreneurship is evolving so fast in the Kingdom d. I did not attend any training	Closed-ended Multiple choice
9. What is the most important reason behind the failure of the majority of start-ups and growth entrepreneurs in attracting investors to finance them?	a. They do not pitch / communicate well with investors b. Their traits that do not convince investors they are the right entrepreneurs c. They come up with ventures' ideas that do not cope with our interests d. They are not practical in their demands e. They do not provide lucrative business plans	Closed-ended Multiple choice

APPENDIX 5: Survey Questions to Investors

Questions	Answers	Type of Question
1. As an investor or working for an investor, I am	a. An Angel Investor b. An Equity/VC Investor c. An investor providing loans to entrepreneurs for a certain interest or fees	Closed-ended Multiple choice
2. What is the funding stage you mainly focus on?	a. Early Stage Financing b. Expansion Financing c. Acquisition / Buyout Financing	Closed-ended Multiple choice
3. I (or my institute) invest in the following areas	a. (ICT) Information & Communication Technology b. Health c. Education d. Energy (oil, gas, solar) e. Construction f. Food & related manufacturing g. Manufacturing in general h. Services in general i. Other	Closed-ended Multiple choice
4. As an investor or working for an investor, my institute provides entrepreneurs - at a certain early stage in relation with them - by	a. Training and / or mentorship by my institute b. Training and / or mentorship by a freelancer trainer or a professional institute c. Neither providing training nor mentorship to entrepreneurs	Closed-ended Multiple choice
5. I communicate with entrepreneurship education or training institutes to help them	a. To evaluate their entrepreneurship training courses/programs b. To provide or participate in training / mentoring sessions c. No communication or relation with any entrepreneurship-training institute	Closed-ended Multiple choice
6. Entrepreneurs usually approach us through	a. They apply through our website b. Direct contact via our origination team c. Business networks	Closed-ended Multiple choice
7. Do you inform potential entrepreneurs how you conduct your due diligence?	a. Yes b. Not always / to some extent c. No	Closed-ended Multiple choice
8. In case of rejection, do you inform the entrepreneur why he/she was rejected?	a. Yes b. Not always / to some extent c. No	Closed-ended Multiple choice
9. How you or your institute can help entrepreneurs in dealing with investors?	a. Provide (knowledge) or participate (teaching) in training / mentoring programs b. Provide (knowledge) or participate (teaching) in a dedicated session showing entrepreneurs how to deal with investors or how investors work while evaluating ventures c. Provide financing to entrepreneurs	Closed-ended Multiple choice
10. What is the most important reason behind the failure of the majority of start-ups and growth entrepreneurs in attracting investors to finance them?	a. They do not pitch / communicate well with investors b. Their traits that do not convince investors they are the right entrepreneurs c. They come up with ventures' ideas that do not cope with our interests d. They are not practical in their demands e. They do not provide lucrative business plans	Closed-ended Multiple choice
11. In general, how do you see the quality of entrepreneurship training and education currently available in the Kingdom?	a. Excellent b. There is a buffer for improvement c. Poor, needs restructuring as entrepreneurship is evolving so fast in the Kingdom	Closed-ended Multiple choice
12. Do you see entrepreneurs; in general, know what does "Due Diligence" investors conduct mean?	a. Yes b. They have basic knowledge about due diligence, but this does not mean they know actually how it happens c. No, they do not	Closed-ended Multiple choice

APPENDIX 6: Survey Questions to Training Experts

Questions	Answers	Type of Question
1. As a subject matter expert in entrepreneurship education and / or training, I am	a. An instructor / trainer / Mentor b. Entrepreneurship Education / Training material developer / designer c. Entrepreneurship Education / Training program / institute manager	Closed-ended Multiple choice
2. I or my institute provide entrepreneurs by	a. Training services only b. Training, and mentorship / coaching services c. Other	Closed-ended Multiple choice
3. I or my institute communicate with investment institutes	a. To learn from investors what they are expecting the training institute to teach entrepreneurs b. To help in evaluating entrepreneurship training courses/programs c. To help by providing or participating in their training sessions or provide mentoring to entrepreneurs d. To give a chance to investors to early source good entrepreneurs and ventures e. No communication or relation with any investor	Closed-ended Multiple choice
4. Do you teach your students the entrepreneurs how investors conduct their professional due diligence?	a. Yes, it is a dedicated part of the training we give b. It is included in the training course / program but not as a dedicated section	Closed-ended Multiple choice
5. How do entrepreneurs approach you?	a. Through a website / direct contact b. Through our marketing team c. Through business network	Closed-ended Multiple choice
6. What is the most important reason behind the failure of the majority of start-ups and growth entrepreneurs in attracting investors to finance them?	a. They do not pitch / communicate well with investors b. Their Traits that do not convince investors they are the right entrepreneurs c. They come up with ventures' ideas that do not cope with our interests d. They are not practical in their demands e. They do not provide lucrative business plans f. Other	Closed-ended Multiple choice
7. Do you see the need for improving business plan preparation training courses that are available today in the Kingdom to better help entrepreneurs dealing with investors?	a. Yes, available training programs and courses are either outdated or do not prepare entrepreneurs well when dealing with investors b. Yes to some extent c. No, available programs and courses are good enough at this stage	Closed-ended Multiple choice
8. Do you see entrepreneurs; in general, know what does "Due Diligence" investors conduct mean?	a. Yes b. They have basic knowledge about due diligence, but this does not mean they know actually how it happens c. No, they do not	Closed-ended Multiple choice

APPENDIX 7: Survey Questions on Attractiveness of Entrepreneur to Investor

Questions	Answers	Type of Question
1. In the first meeting, the investor, mostly, gets attracted to an	a. Pitching and responses to the investor's questions b. Traits, look and quality of personality c. Communication and response to the investor's questions d. Business plan e. I do not know	Closed-ended Multiple choice
2. The investor sees an entrepreneur as a person who	a. Owns a project at an early stage (ideation or fund raising stage) b. Owns a project that is running with at least a one year track record (started already) c. A person who brings the investor a business opportunity regardless in what stage this entrepreneur is at	Closed-ended Multiple choice
3. The investor prefers the	a. An innovative idea in a business plan summary b. An innovative idea in a full fledge business plan c. A growth idea in a business plan summary d. A growth idea in a full fledge business plan	Closed-ended Multiple choice
4. The investor searches through the entrepreneur's education background	a. Track record of success b. Entrepreneurship training c. Knowledge of project core area d. General business knowledge e. Educational background is not important but the practical experience	Closed-ended Multiple choice
5. The investor searches through the entrepreneur's experience	a. Track record of success b. Entrepreneurial ventures c. Skills in project core area d. Skills in business management e. Experience is not important but the idea itself	Closed-ended Multiple choice
6. The most important entrepreneurial trait an investor searches for in an	a. The motives b. Acceptance of uncertainty c. Leadership and vision d. Quality of convincing and communicating e. Traits are not an issue anymore these days	Closed-ended Multiple choice
7. The best description of motives of the entrepreneurs to the investor is	a. Enterprising b. Competitive c. Challenge addictive d. Hard worker e. Traits are not an issue anymore these days	Closed-ended Multiple choice
8. The best description of 'acceptance of uncertainty' in the entrepreneur to	a. Self-confident b. Resilient c. Flexible d. Pioneer e. Traits are not an issue anymore these days	Closed-ended Multiple choice
9. The best description of 'leadership' in the entrepreneurs to the investor is	a. Visionary b. Charismatic c. Action oriented d. Motivating and pushy e. Traits are not an issue anymore these days	Closed-ended Multiple choice
10. The best description of 'the quality of convincing and communication' in	a. Persuasive b. Enthusiast c. Talkative d. Demonstrative e. Traits are not an issue anymore	Closed-ended Multiple choice

APPENDIX 8: Survey Questions on Attractiveness of Venture to Investor

Questions	Answers	Type of Question
1. The timing for the idea is the first thing an investor look at	a. True, some great ideas come in the wrong timing. The market could not be ready for it b. Not true, a great idea could build its market c. I do not know if this is an issue investors focus on or not	Closed-ended Multiple choice
2. The minimal requirement an investor is looking for in a venture is	a. An innovative idea that creates a new market b. A growth idea that fill a gap in an existing market c. A conventional idea that makes high returns d. I do not know	Closed-ended Multiple choice
3. For an investor, the attractiveness of the venture can be mainly seen through	a. The geographic scope b. The sector scope c. The level of innovation d. Size of funding ticket e. I do not know	Closed-ended Multiple choice
4. The geographic scope of the	a. Saudi Arabia b. The GCC Countries c. Broad focus d. I do not know	Closed-ended Multiple choice
5. The degree of innovation in a	a. Low b. Medium c. High d. I do not know	Closed-ended Multiple choice
6. The size of funding ticket of a	a. Less than 200 Thousands Saudi Riyal b. More than 200 Thousands Saudi Riyal but less than 2 Millions Saudi Riyal c. More than 2 Millions Saudi Riyal but less than 4 Million Saudi Riyal d. The ticket size is not an issue for investors when there is an opportunity in a venture e. I do not know	Closed-ended Multiple choice
7. The stage of development of a venture that attracts the investor in the Kingdom more is	a. Ideation b. Business planning c. Funding d. Growth e. I do not know	Closed-ended Multiple choice
8. The competitive intensity of a venture that attracts the investor in the Kingdom more is	a. No or limited competition intensity b. Average competitive intensity c. High competitive intensity d. I do not know	Closed-ended Multiple choice
9. The industry dynamics of a venture that attracts the investor	a. Stable b. Demand / consumer disruption c. Technology disruption d. I do not know	Closed-ended Multiple choice
10. The regularity environment of a venture that attracts the investor in the Kingdom more is	a. No / Limited regulation b. Semi regulated c. Highly regulated d. I do not know	Closed-ended Multiple choice

APPENDIX 9: Survey Questions on Attractiveness of Business Plan to Investor

Questions	Answers	Type of Question
1. An investor would like to see first	a. A patching session for a good venture idea regardless of the quality of the business plan b. An executive summary only. It is not expected from an entrepreneur to deliver a professional business plan c. A full-fledge business plan d. I do not know	Closed-ended Ranking
2. For an investor, the venture's clarity can be seen in the business plan through	a. A business proposition b. A business plan summary c. The investor relies on a set of elements that identify the venture's clarity	
3. For an investor, a proven business model with a minimum of a one year track-record is important to appear in the business plan	a. True b. True, in case it is a venture's growth business plan only c. Not true	Closed-ended Multiple choice
4. For an investor, the attractiveness of a business plan can be seen through its elaboration mainly on the	a. Feasibility b. Market size c. Profitability d. Industry structure e. Not in the business plan but how the entrepreneur pitches his/her venture	Closed-ended Multiple choice
5. What is the issue that attracts the investor most in a business plan	a. Focus on key issues in the business plan b. Profitability c. The market size d. Prove ability to supply the product/service e. Clear identification of the channels of distributions for product/service f. Competition and venture's position g. The team dynamics and fit h. Consistency with market insight i. Fund / financing needs	Closed-ended Ranking
6. For the investor, the insights of failure or success in a business plan can be mainly seen in	a. The financial part b. The customer's part c. The competitive advantage part d. The growth plan part e. The exit part	Closed-ended Multiple choice
7. Do you know what does "Due Diligence" investors conduct mean or how investors conduct due diligence?	a. Yes, I do b. I have basic knowledge about due diligence, but this does not mean I know actually how it happens c. No, I do not	Closed-ended Multiple choice

APPENDIX 10: Survey Questions to Entrepreneurs only on Due Diligence

Questions	Answers	Type of Questions
1. In general, during the initial screening, the investor filters proposals by focusing on	a. High potential entrepreneur b. Venture growth support c. Quality of communication of success story in the proposal d. I do not know	Closed-ended Multiple choice
2. In general, the investor's due diligence process focuses more on the venture's	a. Accounting b. Company appraisal c. Legal issues d. Commercial issues e. All of the above f. I do not know	Closed-ended Multiple choice
3. In general, the primary focus of investor's due diligence is on	a. Market attractiveness b. Competitive position c. Business model and capabilities d. The Business Plan e. The focus could be all of the above but varies in significance based on the nature of the venture f. I do not know	Closed-ended Multiple choice
4. In general, an investor avoids "irrational exuberance" around new technologies, regulatory changes, etc. Although changes can create extraordinary wealth yet often creates more losers than winners	a. Agree b. Disagree c. I do not know	Closed-ended Multiple choice
5. In general, an investor considers "autocorrelation" of industry success variables. Single variable sensitivities can often over/underestimate true impact on evaluation	a. Agree b. Disagree c. I do not know	Closed-ended Multiple choice
6. In general, an investor models the extremes of "exogenous" market disruptions in downside cases: regulatory/legislative changes, bailouts, etc.	a. Agree b. Disagree c. I do not know	Closed-ended Multiple choice
7. In general, an investor takes a hard look at management. The "OK" team is not acceptable to the investor	a. Agree b. Disagree c. I do not know	Closed-ended Multiple choice
8. In general, an investor asks "What is the likely future growth rate?"	a. Agree b. Disagree c. I do not know	Closed-ended Multiple choice
9. In general, an investor asks what is the full potential of the opportunity?	a. Agree b. Disagree c. I do not know	Closed-ended Multiple choice
10. In general, an investor asks how fast will consumers adopt the new product/offer?	a. Agree b. Disagree c. I do not know	Closed-ended Multiple choice
11. In general, an investor asks where is the industry, target positioned in relevant cycles (Macro, industry lifecycle, etc.)?	a. Agree b. Disagree c. I do not know	Closed-ended Multiple choice
12. In general, the investor mainly assesses the following risk of market attractiveness	a. Market growth limitation or declining b. Distressed/negatively-trending industry profitability c. Intensely competitive market d. Low barriers to entry e. Product substitution f. All of the above g. I do not know	Closed-ended Rank order
13. In general, the investor mainly assesses the following risk of competitive positions	a. Insufficient competitive advantage of products or services b. Insufficient sustainability of advantage c. Declining market share d. All of the above e. I do not know	Closed-ended Multiple choice
14. In general, the investor mainly assesses the following risk of business model & capabilities	a. High customer acquisition costs or switching costs b. Volatility of profitability c. Lack of critical capabilities in core team d. Regulatory environment e. Technology standards f. All of the above g. I do not know	Closed-ended Rank order
15. In general, the investor mainly assesses the following risk of the business plan	a. High reliance of business plan on specific conditions b. Underestimation of opex or capex c. Time slippery due to external factors d. All of the above e. I do not know	Closed-ended Rank order

APPENDIX 11: Interview Questions

Pillars of Discussion	The Main Questions	Probs	Follow-up
1. The Case	Does the case exist?	Why / why not it exists?	During Interview / Comment(s)
2. Attractiveness Factors	Do you agree/ disagree on the findings?	Why a gap exists between entrepreneurs and investors' answers?	During Interview / Comment(s)
3. Current Quality of Entrepreneurship Education & Training Programs	What do you think of the available training quality?	Why/ What is the problem of the available training programs?	During Interview / Comment(s)
4. The existence and impact of due diligence as a subject to be included in training	Does Due Diligence as a concept exist in current training programs?	Why / why not? In case it does not exist, does the unavailability of Due Diligence in training plays a role in such status?	During Interview / Comment(s)
5. The proposed new optimal training program	Do you agrees to have a new training module?	Why / What is the foundation of this optimal program?	During Interview / Comment(s)
6. The willingness of collaboration in developing the proposed optimal training program	Are you ready to volunteerly collaborate in building it?	How?	During Interview / Comment(s)
7. The study	Do you see this study as important to entrepreneurship ecosystem in Saudi Arabia?	What is its impact?	During Interview / Comment(s)

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